# STRATEGIES FOR PREPARING UNITED STATES ARMY COMBAT ORGANIZATIONS FOR THE INEVITABILITY OF CASUALTIES

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In this authors opinion the United States Army is not doing enough to prepare combat organizations for the inevitability of casualties. This thesis proposes the following primary research question: How can United States Army combat organizations better prepare for the inevitability of casualties? The United States of America has been in a state of war for over 11 years. Every passing day our nation's most precious commodity, our soldiers, are being killed or wounded in action on the battlefield. Yet, every day organizations across the Army are either preparing for war or are actively engaged in conflict without being properly prepared to face the grim reality that they will most likely lose someone within their ranks. This qualitative research effort seeks to identify effective strategies and techniques to assist United States Army combat organizations to prepare for the inevitability of casualties. The secondary research questions are: (1) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) What can be done to assist United States Army combat organizations to execute their duties once there has been a casualty? This thesis will enable organizational leaders to understand and incorporate strategies and techniques that will assist them in preparing their units for the realities of combat.

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

STRATEGIES FOR PREPARING UNITED STATES ARMY COMBAT ORGANIZATIONS FOR THE INEVITABILITY OF CASUALTIES,
by Major Daniel L. Rausch, 113 pages.

In this author's opinion, the United States Army is not doing enough to prepare combat organizations for the inevitability of casualties. This thesis proposes the following primary research question: How can United States Army combat organizations better prepare for the inevitability of casualties? The United States of America has been in a state of war for over 11 years. Every passing day our nation's most precious commodity, our soldiers, are being killed or wounded in action on the battlefield. Yet, every day organizations across the Army are either preparing for war or are actively engaged in conflict without being properly prepared to face the grim reality that they will most likely lose someone within their ranks. This qualitative research effort seeks to identify effective strategies and techniques to assist United States Army combat organizations to prepare for the inevitability of casualties. The secondary research questions are: (1) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) What can be done to assist United States Army combat organizations to execute their duties once there has been a casualty? This thesis will enable organizational leaders to understand and incorporate strategies and techniques that will assist them in preparing their units for the realities of combat.

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This thesis would not be possible if it were not for the invaluable guidance from my committee, Mr. Thomas Meara, Dr. Kevin Shea, and Colonel David Bachelor. Thank you for all for your guidance and encouragement throughout this difficult but rewarding process.

I would especially like to thank all of the soldiers that influenced me throughout my career. I have had some truly outstanding officers and non-commissioned officers as mentors through the years and I appreciate all of the advice and guidance that I have received. I would also like to thank all the soldiers that have served with me and all the students that I have had the privilege to instruct. I hope you have learned as much from me as I have from you.

This study is dedicated to the six fine young soldiers that paid the ultimate sacrifice while serving under my command, CPL David Watson , CPL Peter Schmidt, SGT Kenneth Booker, SGT Christopher Kruse, CPL Luke Runyan, and CPL Chad Groepper. You will always be in my thoughts and prayers. May God grant you everlasting rest and eternal peace.

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# ACRONYMS

| | |
|---|---|
| CSF | Comprehensive Soldier Fitness |
| FRG | Family Readiness Group |
| MASCAL | Mass Casualty |
| SNS | Sympathetic Nervous System |

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# CHAPTER 1

# INTRODUCTION

This qualitative research effort seeks to identify effective strategies and techniques to assist United States Army combat organizations to prepare for the inevitability of casualties. As long as there has been war there has been death and destruction. These things are intrinsically linked and cannot be separated. Richard Holmes stated that “death and wounds are an inseparable part of battle, and confront the soldier in a myriad of guises” (Holmes 1985, 176). Once political leaders decide to fight it is the duty of their militaries to pick up their arms and impose their will on others. John Keegan said, “Battle is essentially a moral conflict. It requires, if it is to take place, a mutual and sustained act of will by two contending parties, and if it is to result in a decision, the moral collapse of one of them” (Keegan 1976, 302). The severity of the actions, battles, campaigns or wars may vary but the fact remains that when war is waged soldiers die.

If this is true then how can soldiers negotiate through the violence and horror of war and still conduct their duties effectively? How can a leader of men knowingly send his troops to their deaths or lead them in an assault up a hill full knowing that they will most likely never make it back alive? How do organizations continue their mission when they are involved in a mass casualty (MASCAL) situation? What effects do casualties have on organizations? These are the more general questions that help formulate the primary question. How can we better prepare United States Army combat organizations for the inevitability of casualties?

## The Problem

In this author's opinion the United States Army is not doing enough to prepare combat organizations for the inevitability of casualties. This thesis proposes the following primary research question: How can United States Army combat organizations better prepare for the inevitability of casualties? The United States of America has been in a state of war for over 11 years. Every passing day our nation's most precious commodity, our soldiers, are being killed or wounded in action on the battlefield. The Department of Defense has gone to great lengths to take care of our Wounded Warriors through a multitude of government programs that strive to facilitate the recovery of our veterans and return them to duty if they are able or set them up for success in civilian life if they are not. For the soldiers that have paid the ultimate sacrifice the United States Army takes great care with respectfully looking after the soldiers remains as well as their families emotional, spiritual, and financial needs. Yet every day organizations across the Army are either preparing for war, or are actively engaged in conflict without being properly prepared to face the grim reality that they will most likely lose someone within their ranks. It is amazing how much the death of a soldier can effect an organization, specifically a combat organization.

## Research Questions

This thesis proposes the following primary research question: How can United States Army combat organizations better prepare for the inevitability of casualties? The secondary research questions are: (1) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) What can be done to

assist United States Army combat organizations to execute their duties once there has been a casualty?

## The Human Dimension

"Fear is the common bond between fighting men. The overwhelming majority of soldiers experience fear during or before battle: what vary are its physical manifestations, its nature and intensity, the threat which induces it and the manner in which it is managed" (Holmes 1985, 204). Fear can be devastating to soldiers and combat organizations. Soldiers' primary fears revolve around becoming a casualty of war, seeing their buddies become casualties, or failing in their duties in battle. The impact of fear in combat has been recognized by many of the great military theorists and historians, such as Carl Von Clausewitz, Lord Moran, John Keegan, Richard Holmes, among others. The relationship between fear and death is somewhat of a paradox because it is the fear of death that causes men to baulk but it is the witnessing of death that generates fear. Death is a constant companion to combat soldiers. "War is a deadly serious business and most warriors recognize that their life, and the lives of their comrades, may be forfeited to the cause for which they are fighting" (Karis 1989, 1). Most would agree that the chief impact of fear and death is in the will to fight.

On the subject of the birth of fear in soldiers Clausewitz, in *On War*, wrote about the dangers of war where he stated that "the sight of men being killed and mutilated moves our pounding hearts to awe and pity" (Clausewitz 1984, 113). What is it that soldiers fear? Well, naturally soldiers are afraid of dying but dying is not the only major fear that is on the forefront of soldiers' minds in battle. "Coming to grips with the thought

of dying is not an easy task for a soldier. It is difficult for him to accept the death of his close friends and even more difficult to comprehend his own demise" (Karis 1989, 1).

> In their repeated dealings with wounds and death, soldiers may eventually develop a shell of cynicism or indifference, or they may be so affected, particularly by the death of close friends, that they find it impossible to continue. But whatever the precise nature of men's response to it, there can be no doubting the fact that the fear of being killed or wounded, and the experience of watching others suffer and die, makes a powerful contribution to the strain of battle. (Holmes 1985, 203)

Karis determined that casualties occurring in the small primary group, such as from the platoon or squad, were dreaded more than casualties that occurred in other platoon's within the company or outside the company. Karis writes "in units which experienced high casualty rates, the sight of one or more best friends killed was related to the amount of fear experienced by the survivors (Karis 1989, 15).

Interestingly enough many soldiers fear failing themselves, their peers and superiors, and their unit above all else. Holmes wrote, "Before going into action for the first time, men are often more frightened of disgracing themselves than they are of being killed or wounded" and that officers and non-commissioned officers have the "most to lose by showing weakness" (Holmes 1985, 206). Holmes also stated that "the sight of men being killed and wounded changes the soldier's perception of fear. For soldiers in action for the first time the greatest fear is that of being a coward. But for veterans the fear of being crippled and disfigured for life looms largest" (Holmes 1985, 182). Keegan wrote, "What battles have in common is human: the behavior of men struggling to reconcile their instinct for self-preservation, their sense of honour and the achievement of some aim over which other men are ready to kill them. The study of battle is therefore always a study of fear" (Keegan 1976, 303). In *The Anatomy of Courage,* Lord Moran

wrote that the thing that many soldiers are afraid of is fear itself. Moran explains that "no man has an unlimited stock of courage and that when this is done he is finished" (Moran 1987, 23).

In *On Killing*, Dave Grossman has a somewhat different opinion on the matter of fear and the will to fight as it applies to psychological casualties. Grossman cites several clinical studies that surprisingly state that loss of life and injury ranked lower than the fear of "letting others down." The studies showed that "the fear of not being able to meet the terrible obligations of combat that weighs most heavily on the minds of combat soldiers" (Grossman 1995, 53). Grossman contends that fear in battle is a consideration but it is only one consideration combined with many others such as "exhaustion, hate, horror, and the irreconcilable task of balancing these with the need to kill, eventually drives the soldier . . . over the brink into the region that we call insanity" (Grossman 1995, 54). In Grossman's opinion "in the realm of psychiatric casualty causation, fear does not reign supreme on the battlefield" (Grossman 1995, 65).

## Assumptions

The following assumptions have been made during the compilation of this thesis. Assumptions include:

1. United States Army combat organizations will continue to incur casualties during combat operations.

2. Casualties pose significant challenges to United States Army combat organizations.

3. Casualties will continue to have negative effects on United States Army combat organizations.

4. Adequate preparation, leadership, and training techniques can help reduce the effects of casualties in United States Army combat organizations and assist these organizations to continue to execute their missions during combat.

5. United States Army combat organizations will take every possible step to avoid casualties within the limitations of the operating environment and the mission.

## Definition of Terms

Casualty: Any person who is lost to his organization by reason of having been declared dead, wounded, injured, diseased, interned, captured, retained, missing in action, beleaguered, besieged, or detained (Department of the Army 2004, 1-27).

Combat Stress: Combat stress includes all the physiological and emotional stresses encountered as a direct result of the dangers and mission demands of combat (Department of the Army 2004, 1-1).

Combat and Operational Control Reaction: Combat and Operational Stress Reaction–The expected, predictable, emotional, intellectual, physical, and-or behavioral reactions of Service members who have been exposed to stressful events in combat or military operations other than war. Also known as COSR (Department of the Army 2006, Glossary-5).

Combat and Operational Stress Control: Programs developed and actions taken by military leadership to prevent, identify, and manage adverse combat and operational stress reactions in units; optimize mission performance; conserve fighting strength; prevent or minimize adverse effects of combat and operational stress on members' physical, psychological, intellectual and social health; and to return the unit or Service member to duty expeditiously (Department of the Army 2009c, Glossary-5).

Fear: An automatic emotional reaction to a perceived danger or threat characterized by a high state of arousal (Asken, Grossman, and Christensen 2010, 77).

Mental Toughness: Mental toughness is possessing, understanding, and being able to utilize a set of psychological skills that allow the effective and even maximal execution or adaptation, and persistence of decision-making and physical and tactical skills learned in training and by experience. Mental toughness expresses itself every day, as well as in high stress, critical situations (Asken, Grossman, and Christensen 2010, x).

Resilience: The Army definition of resilience is the ability to grow and thrive in the face of challenges and bounce back from adversity (Department of the Army 2009a).

## Limitations

The researcher believes that time has been a limited factor to adequately address all the issues related to the topic. It should be apparent that this author could not feasibly cover such a vast topic in such a short span of time because this topic crosses over and through so many different aspects of the Army culture. Additionally, the reader must keep in mind that this work is a qualitative study that focuses on answering the primary question. When discussing differences between research methodologies Patton said, “In many ways a major trade-off between quantitative methods and qualitative methods is the trade-off between breadth and depth” (Patton 1990, 165). This qualitative method has permitted the researcher to study selected issues in depth and detail but not very broad in scope. Furthermore, the data analysis method used can be criticized as possibly being a subjective method of study. This author has attempted to stay as objective as possible throughout this analysis although the author may be somewhat bias based on preconceived notions due to personal experiences on this topic.

## Scope and Delimitations

This study will discuss different studies and case studies from various wars but will not go into great detail into any one war. This study will attempt to compile information on a broad scale in an effort to create a better understanding of how to prepare for and deal with casualties. This study examines the human dimension and the characteristics of former and current operating environments that lead to casualties and methods that may help combat organizations prepare for and mitigate the effects of those casualties. This study is primarily being conducted to benefit United States Army combat organizations such as Infantry Brigade Combat Teams, Heavy Brigade Combat Teams, Stryker Brigade Combat Teams, and Special Forces units but may also be useful to other types of units, branches of service, and civilian agencies such as police departments and fire departments.

## Significance of Study

Casualties are always on the forefront of the minds of war-fighters. The stress caused by today's contemporary operating environment and the losses that have been sustained in combat have and will continue to take a toll on United States Army combat forces. The ability to prepare United States Army combat organizations for casualties will make them more resilient on and off of the battlefield. As a career Infantry officer in the United States Army, the author has been a combat leader at the platoon and company echelon and has been exposed to combat casualties during all three deployments to Afghanistan and Iraq in support of the War on Terrorism. The author has encountered and dealt with combat casualties in multiple leadership roles, including direct combat leadership positions such as infantry rifle platoon leader and infantry company

commander billets, as well as executive officer and brigade assistant operations officer positions. While serving as a Stryker infantry company commander, the authors unit deployed in support of Operation Iraqi Freedom in April, 2007, where they operated in some of the most contested and dangerous parts of Baghdad and Diyala for 15 months. During this time six soldiers in the authors company were killed in action and 24 were wounded in action. The author's interest in the area of combat casualties and their effects on United States Army combat organizations is one borne of direct influence on the author due to personal experience in this area. This author endeavours to mitigate the effects of combat casualties on Army combat organizations by presenting methods to prepare these organizations for the reality and inevitability of casualties during combat.

## Summary

The purpose of this chapter was to outline the topic of this thesis. The author attempted to thoroughly clarify the problem and shape the primary and secondary questions towards solving the problem. The human dimension was briefly discussed in order to give the reader an initial understanding of the relationship between casualties, fear, and the will to fight. The assumptions that the author considered during the study have been listed up front to ensure the reader keeps them in mind and some key definitions have been included to further the understanding of the topic. The author has also included some key limitations that the reader should be made aware of and has endeavored to explain the scope and significance of this thesis. This chapter should lay the groundwork for the study that is being proposed and guide the reader towards the understanding that more must be done in United States Army combat organizations to prepare for and deal with the inevitability of casualties.

# CHAPTER 2

# LITERATURE REVIEW

This qualitative research study strives to determine how United States Army combat organizations can better prepare for the inevitability of casualties during combat operations. In order to answer the primary question, how can United States Army combat organizations better prepare for the inevitability of casualties, the following secondary questions will be addressed: (1) what can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) what can be done to assist United States Army combat organizations to continue to execute their duties once there has been a casualty during combat operations?

There are multiple government manuals, books, theses, articles, and studies written on the subject of combat casualties throughout history that will be examined. The literature review will focus on the general effects that casualties can have on United States Army combat organizations in order to determine the ways to eliminate, or more likely mitigate, those effects. This chapter provides literature that is relevant to reducing the effects that combat casualties have on United States Army combat organizations. The following information addresses the corresponding secondary questions.

## Department of the Army Field Manuals

### Department of the Army Field Manual 1-02, Operational Terms and Graphics

United States Army doctrinal field manuals provide a valuable reference for defining what is categorized as a casualty. The Department of the Army Field Manual 1-02, *Operational Terms and Graphics*, 2004, defines a casualty as "(Army) Any person

who is lost to his organization by reason of having been declared dead, wounded, injured, diseased, interned, captured, retained, missing in action, beleaguered, besieged, or detained" (Department of the Army 2004, 1-27). For the purposes of this thesis it is important to understand the baseline definition of a casualty because the rest of Army doctrine and other scholarly works utilize this definition which is derived from Department of the Army Field Manual 8-55, *Planning for Health Service Support*, 1994.

## Department of the Army Field Manual 8-55, Planning for Health Service Support

The Department of the Army Field Manual 8-55, *Planning for Health Support*, 1994, although somewhat antiquated, provides many of the baseline definitions and concepts that are utilized throughout the spectrum of medical field manuals and that the reader should understand prior to reading further through this thesis. "This manual provides guidance to health service support (HSS) planners at all echelons of care within a theater of operations (TO). It contains a digest of the accepted principles and procedures pertaining to HSS planning" (Department of the Army 1994a, v). Chapters 3 and 4 provide particularly insightful information on planning and experience considerations for patient evacuation and medical regulating which can facilitate medical planning in combat organizations.

Chapter 3 of Field Manual 8-55, planning and experience considerations discusses the basic principles and terms used in casualty and patient classification and reporting. The definition of "casualty" has previously been identified but there are several more definitions of key terms that are important to note such as patient, battle casualty, wounded in action, died of wounds, killed in action, missing in action, captured, interned

and non battle casualty. A battle casualty is “any casualty incurred in action” which means “the direct result of hostile action” or “sustained in combat” (Department of the Army 1994a, 3-1).

A patient is the generic term applying to a “sick, injured, or wounded person who receives medical care or treatment from medically trained personnel who make medically substantiated decisions based on medical military occupational specialty (MOS)-specific training” (Department of the Army 1994a, 3-2). Battle casualties include: killed in action, defined as “a battle casualty who is killed outright, or who dies as a result of wounds before reaching an [Medical Treatment Facility (MTF)],” wounded in action, defined as “a battle casualty other than ‘killed in action’ who has incurred an injury due to an external agent or cause. The term Wounded in Action covers all wounds and other injuries incurred in action,” died of wounds received in action, defined as “battle casualties who die of wounds or other injuries received in action after having reached an MTF,” missing in action, defined as “battle casualties whose whereabouts or fate cannot be determined and who are not known to be in an unauthorized battle status,” captured, defined as “battle casualties known to have been taken into custody by a hostile force as a result of and for reasons arising out of any armed conflict in which US Armed Forces are engaged” and interned, defined as “battle casualties known to have been taken into custody by a nonbelligerent foreign power as the result of and for reasons arising out of armed conflict in which the US Armed Forces are engaged” (Department of the Army 1994a, 3-2).

A non battle casualty is defined as “a person who is not a battle casualty, but who is lost to his organization by reason of disease or injury, including persons dying of

disease or injury, or by reason of being missing where the absence does not appear voluntary, due to enemy action, or being interned" (Department of the Army 1994a, 3-2). These terms and their meanings are important for United States Army combat organizations and leaders to understand when dealing with casualties so the details of the casualty can be reported accurately and dealt with accordingly.

Chapter 4 of this field manual, patient evacuation and medical regulating, describes the factors that are analyzed when determining the theater evacuation policy and its impacts on the health service support requirements, medical evacuation means and tenants, medical regulating in reference to the casualty management system. "Medical regulating is a casualty management system designed to coordinate the movement of patients from site of injury or onset of disease through successive echelons of medical care to an MTF that can provide the appropriate treatment" (Department of the Army 1994a, 4-10). Chapter 4 also describes the standard types of medical evacuation units along with their missions, capabilities, and limitations.

One final topic of note in this field manual is the definition and description of MASCAL situations. It is important for units and leaders to understand what the term MASCAL actually means because it is generally misconstrued in the contemporary operating environment. FM 8-55 defines MASCAL as "a large number of casualties [that] has been produced simultaneously or within a relatively short period of time. It also means that the number of patients requiring medical care exceeds the medical capability to provide treatment in a timely manner" (Department of the Army 1994a, 15-1). MASCAL situations cause a significant amount of friction on the contemporary battlefield and should be anticipated, planned for, and rehearsed at all echelons because

"in a MASCAL situation, the conventional treatment priorities must be abandoned. This means a radical departure from the traditional practice of providing early complete definitive treatment to each patient on the basis of his individual needs" (Department of the Army 1994a, 15-1). Department of the Army Field Manual 4-02.6, *The Medical Company Tactics, Techniques and Procedures*, 2001, discusses MASCAL in reference to triage (sorting) techniques, which is the means for evaluating and categorizing casualties for priority of treatment, at greater length.

### Department of the Army Field Manual 4-02.2, Medical Evacuation

In April 2007, the Department of the Army published Field Manual 4-02.2, *Medical Evacuation*, Change 1 of this publication was published in 2009. FM 4-02.2 is a comprehensive piece of doctrine that deals with medical evacuation specifically, whereas some of the previously mentioned manuals only briefly touch on this subject. This field manual covers an overview of the Army health system and medical evacuation, medical evacuation resources, operational and tactical evacuation planning, Army medical evacuation, medical evacuation in specific environments, medical regulating as well as multiple useful appendices (Department of the Army 2007, iii). FM 4-02.2 "provides doctrine, as well as techniques and procedures for conducting medical evacuation and medical regulating operations" (Department of the Army 2007, vii).

FM 4-02.2 defines medical evacuation as "the system which provides the vital linkage between the roles of care necessary to sustain the patient during transport. This is accomplished by providing en route medical care and emergency medical intervention, if required, and to enhance the individual's prognosis and to reduce long-term disability"

(Department of the Army 2007, ix). It is extremely important that United States Army combat organizations understand the capabilities and limitations of the medical evacuation organizations supporting their operations, as well as the medical evacuation capabilities and limitations of their own organic assets to ensure the survivability of casualties. Medical planners use the principles of the Army health system as a framework and guide to ensure that all medical plans support the higher commander's intent. The six principles of the Army health system are conformity, continuity, proximity, flexibility, and mobility (Department of the Army 2007, 1-2). The medical planner influences the higher level plan with these principles and ensures that the medical plan conforms to the intent of the commander to aid in achieving the missions purpose, ensures that medical evacuation will be uninterrupted and continuous, establishes control over ground evacuation assets and influence over aero-medical evacuation assets, conducts refined analysis on time distance factors and arrayal of medical evacuation assets on the battlefield to ensure flexibility, and ensures that medical evacuation assets have the same mobility as the unit being supported (Department of the Army 2007, 1-3).

Medical personnel utilized the principles of the Army health system combined with the purpose of medical evacuation to establish six battlefield rules. These battlefield rules govern the way medical personnel establish and deconflict priorities in reference to medical evacuation. The first battlefield rule is "be there," the second rule is "maintain the health of the command," and the third rule is "save lives." These first three battlefield rules allow medical personnel and organizations to rapidly deal with casualties and increase their survivability by providing point of injury and en route medical care while improving or maintaining the morale of soldiers by demonstrating that responsive

medical care is available (Department of the Army 2007, 1-3). The fourth battlefield rule is "clear the battlefield of casualties," the fifth rule is "provide state of the art medical care," and the sixth rule is "ensure early return to duty of the soldier." The last three battlefield rules "serve as a force multiplier as it clears the battlefield enabling the tactical commander to continue his mission with all available combat assets" and "provide medical economy of force" while providing a connection to higher roles of care (Department of the Army 2007, 1-4).

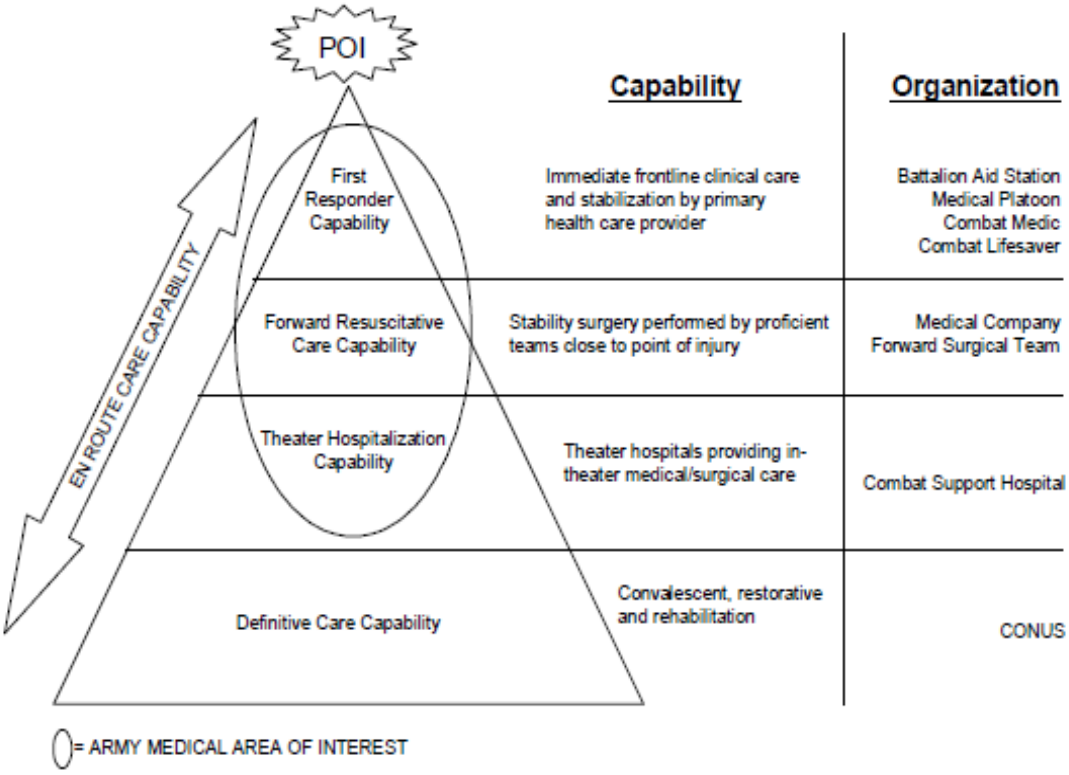


Figure 1. Army Air and Ground Evacuation Platforms Provide Connectivity to Assure a Seamless Continuum of Medical Care

*Source*: Department of the Army Field Manual 4-02.2, *Medical Evacuation* (Washington, DC: Government Printing Office, 2007), 1-6.

Works That Address Individual Soldier and Leader Preparation for Casualties

Leadership and Training Techniques to Help Reduce Combat Stress in the United States of America's Ground Combat Forces and Combat and Operational Stress: Minimizing its Adverse Effects on Service Members

*Leadership and Training Techniques to Help Reduce Combat Stress in the United States of America's Ground Combat Forces*, dated June 2010, "addresses the effectiveness of leadership and training techniques to help reduce combat stress in the United States of America's ground forces during the current overseas contingency operations" (Bethea 2010, v). Additionally, this qualitative thesis seeks to answer the primary question, "can leadership and training techniques help reduce combat stress in the United States of America's ground forces" and four secondary questions: "what is combat stress, how does leadership influence stress within units, what leadership characteristics, techniques, and activities are most effective in reducing combat stress, and what training techniques and interventions are most effective in reducing combat stress" (Bethea 2010, v)? The focus of this study was to determine ways to maintain a strong deployable force to accomplish the missions identified by the Department of Defense and the National Command Authority.

"Combat and Operational Stress: Minimizing its Adverse Effect on Service Members," dated June 2008, also discusses the effects of combat and operational stress and focuses on the issue of why "the military is reactive against its battle against combat and operational stress and how it can become proactive" (Broadnax 2008, iii). Broadnax's study also identifies what combat and operational stress is and how we can minimize its short and long term negative effects" (Broadnax 2008, iii). The secondary questions found in "Combat and Operational Stress: Minimizing its Adverse Effect on

Service Members" address what the military has done in the past about combat stress, what current military doctrine states about combat stress, how that doctrine has been utilized in the past and what can be done about combat stress in the future (Broadnax 2008, iv). Broadnax makes it clear in his introduction that his study is focused on the prevention of combat and operational stress rather than the treatment of those that suffer from it. Broadnax's paper postulates that "if a program incorporating education, training, and phased prevention is developed and integrated, then the military can minimize the negative effects of combat and operational stress in its service members" (Broadnax 2008, 2).

### Theoretical Dimensions of Small Unit Resilience and Dimensions of Small Unit Resilience in Organizations Facing Threats,Disruption, and Stress

"Theoretical Dimensions of Small Unit Resilience" and "Dimensions of Small Unit Resilience in Organizations Facing Threats, Disruption, and Stress" have been grouped together here because both of these studies share an author named John F. Lopes. They are primarily the same study and share much of the same information. "Theoretical Dimensions of Small Unit Resilience," written by Lopes and advised by Edward H. Powley and Gail F. Thomas is a Naval Postgraduate School MBA Professional Report written in December 2010 and "Dimensions of Small Unit Resilience in Organizations Facing Threats, Disruption, and Stress" is a Naval Post Graduate Technical Report written in June 2011 and authored by both Powley and Lopes. The differences between the two papers seem to be merely cosmetic with "Dimensions of Small Unit Resilience in Organizations Facing Threats, Disruption, and Stress" being a

bit more refined and streamlined. For the purposes of this literature review I will be referencing “Theoretical Dimensions of Small Unit Resilience.”

The overall purpose of Lopes’ study was “to identify how leaders can build, foster, and sustain resiliency in their organizations at the unit level” (Lopes 2010, 4). Lopes’ MBA Professional Report relates to the topic of this thesis and includes perspectives on the topic of small unit resilience. Lopes discusses military and operational stressors as well as the psychological and physiological consequences from these stressors. Lopes included four research questions in his study: what is resilience, how is it that some individuals and units positively respond to adversity, while others do not, why is it important for individuals and small units to be resilient, and how can leaders build, foster, and sustain resiliency in their organizations (Lopes 2010, 4). According to Lopes, his research “provides a conceptual foundation on what resilience is, a framework on how to build resiliency, and an assessment tool dimensions to measure the current state of resilience in small military units” (Lopes 2010, 4).

Within the content of his literature review Lopes utilized multiple references to best determine the best definitions of and the differences between individual, group, and organizational resilience as well as the relationship between leadership in the United States Army and resilience. Throughout his study Lopes seemed to be very concerned with the connection between combat and operational stress, poor resiliency, and ineffectual leadership and the rising problem of suicide in the Army. Lopes defines resiliency as “the capacity for adaptability, positive functioning, or competence following chronic stress or prolonged trauma” (Lopes 2010, 20).

The author discusses several different strategies to eliminate or mitigate stress called enactive, proactive, and reactive strategies. Enactive strategies attempt to remove an individual from the stressors entirely or enact a different environment. Proactive strategies attempt to help an individual's ability to deal with stress by bolstering their personal resiliency. Reactive strategies are short term methods to stop or mitigate stress. Different strategies must be used in different situations. For example, an organization may not have the resources to enact an individual, or remove them entirely from stressors. When a reactive method is used it may help relieve stressors for a short time but it is not effective over the long term. The proactive strategy seems to be the best method available to bolster personal resiliency (Lopes 2010, 10).

Lopes also discussed four Army models and programs utilized to help others understand, alleviate or mitigate combat stress: the Combat and Operational Stress Effect Model, the Soldier Combat and Well Being Model, Battlemind training, and the Comprehensive Soldier Fitness (CSF) Program. The first model, found in Department of the Army, Field Manual 6-22, *Combat and Operational Stress Control Manual for Leaders and Soldiers*, 2009, describes how potentially traumatic events can be caused from combat and operational stress. These potentially traumatic events can be derived from combat stressors or from operational stressors. The individual suffering from combat and operational stress will display some type of combat and operational stress behavior meaning that they will have an adaptive or positive reaction or a negative combat and operational stress reaction. It is these two differing combat and operational stress behaviors that lead to post-combat and operational stress post-traumatic growth or post-traumatic stress disorder (Department of the Army 2009c, 1-2).

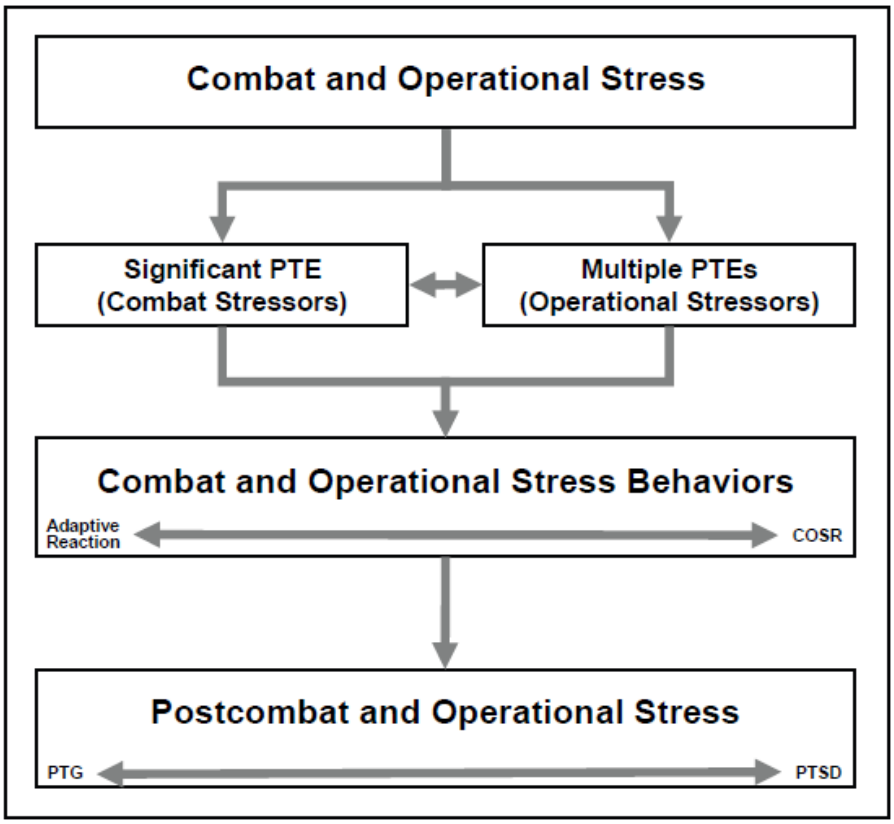


Figure 2. Combat and Operational Stress Effect Model

*Source:* Department of the Army, Field Manual 6-22.5, *Combat and Operational Stress Control Manual for Leaders and Soldiers* (Washington, DC: Government Printing Office, 2009), 1-3.

The second model Lopes includes is the Soldier Combat and Well Being Model which was derived from the Land Combat Survey conducted by the Walter Reed Army Institute of Research. "The concept behind this model is that behavioral health rates are driven by risk factors that can be broken down into three major categories" (Lopes 2010, 13). These three risk factors can be (1) combat related, (2) operational tempo related or (3) have to do with some type of deployment concern. There are five resilience factors that can have an impact on these risk factors but if the risk factors are not mitigated then

there are four behavioral health consequences that may occur. The five resilience factors that can mitigate or eliminate the risk factors are: (1) positive unit leadership and coping skills, (2) the willingness to seek care when needed, (3) organizations reducing barriers to care for those in need, (4) family and marital support, and (5) realistic training. The four possible behavioral health outcomes if the risk factors are not mitigated are: (1) low personal and unit morale, (2) poor mental health, (3) relationship problems, and (4) suicide (Lopes 2010, 14).

The third model, the Army Battlemind Program, is a psychological resiliency program that was developed by the United States Army to "build resiliency in both individual soldiers and units in combat" (Lopes 2010, 14). The Battlemind Program focuses on both pre and post deployment timeframes. "The pre-deployment Battlemind training program is designed to build Soldier resiliency by developing his self-confidence and mental toughness" whereas, "the post-deployment Battlemind training focuses on transitioning from combat to home" (Department of the Army 2009c, 3-8). Battlemind is actually an Army acronym that highlights 10 crucial combat skills that include: Buddies (cohesion), Accountability, Targeted aggression, Tactical awareness, Lethally armed, Emotional control, Mission operational security, Individual responsibility, Nondefensive (combat) driving, Discipline and ordering (Department of the Army 2009c, 3-9). The Battlemind Program is taught both at the organizational and institutional level to develop the "Soldier's inner strength and courage to face fear and adversity during combat and speaks to resiliency skills that are developed to survive" (Department of the Army 2009c, 3-8).

The final Army program that Lopes discusses in his study is the Comprehensive Soldier Fitness Program. “The CSF program takes a lifelong learning approach to resilience, by recognizing that resilience is not built on a single class, event, or experience, but must be developed continuously over time” (Department of the Army 2009a, 16). The CSF program consists of five dimensions and the generic goals associated with those dimensions. The five dimensions of strength are: physical, emotional, social, spiritual, and family. The CSF program is a positive step from the United States Army to “provide soldiers with the tools necessary to face the physical and psychological demands of sustained combat operations” (Lopes 2010, 16). However, Lopes argues, although the CSF program is great for building resiliency in the individual soldier and their family “dimensions for units and organizations are non-existent” (Lopes 2010, 16) and that “what is lacking for military units is an assessment tool that allows leaders to evaluate the level of resilience in their units (at the group and organizational level) before, during, and after operational (combat) deployments” (Lopes 2010, 17).

Not only did Lopes sift through many different authors and references to determine the best definition of resiliency, he did the same to determine what he thought were the best definitions of individual resilience, group resilience, and organizational resilience as well as the characteristics of resilience. Lopes determined that individual resilience is “an individual’s ability to resist or effectively cope with stressors, to tolerate risks, and to be flexible and confident of his or her ability to successfully deal with such situations minimal untoward effects” (Lopes 2010, 20). Group resilience is defined as “the collective ability of the group to learn new skills, build collective efficacy, and positively adapt and adjust to change, challenging conditions, environments, and stressors

over the long term" (Lopes 2010, 21). The definition of organizational resilience is "an organization's ability to absorb intense levels of change with a minimum display of dysfunctional behavior while maintaining high levels of performance and continuing to make use of the system's assets" (Lopes 2010, 22). These three definitions combined with the definition of resilience discussed earlier paint a good picture of the necessary skills, abilities, and attributes that individuals, groups, and organizations must have to be resilient.

Lopes compiled these skills, abilities, and attributes into what he calls the characteristics of resilience. Lopes defines the five "characteristics of resilient groups/organizations as: concerted leadership, adequate resources, enhancement of organizational learning, flexibility/adaptability in the face of adversity, and goal oriented" (Lopes 2010, 24). Lopes places a high priority on quality leadership within organizations in order to provide the requisite vision and common set of values. This concerted leadership must do what is required to build the team and provide the necessary guidance and direction while ensuring that the organization has the resources required to accomplish the goals that have been set in place. If the team has been built skillfully, the organizational vision is clear, and the requisite resources have been allocated then the organization should be able to adapt and improvise to any adverse situations that occur while simultaneously learning from the adversity and getting better (Lopes 2010, 24). "Building resilience is critical to mission accomplishment, longevity and sustainability of Soldiers in combat" (Lopes 2010, 37).

## Psychological Resilience: Preparing our Soldiers for War

The United States Army War College Strategy Research Project, "Psychological Resilience: Preparing Our Soldiers for War," 2011, deals with the problem of psychologically preparing our soldiers for war and building psychological resilience. The author, Ricardo M. Love, is concerned with the problem of post-traumatic stress disorder among soldiers in the United States Army and feels that the Army is much to reactive when it comes to dealing with post-traumatic stress disorder. Love states that "commanders at all levels must become more knowledgeable and proactive in developing ways to prepare their formations to deal with adversity during combat operations" (Love 2011, 1). The author provides several proposals to the Army within his study to facilitate becoming more proactive in preparing formations to deal with adversity in a positive manner while avoiding the negative ramifications.

Love's first recommendation is in the arena of effective mental health screening prior to combat, prior to or during initial entry training or even prior to a soldier entering the Army. Love makes the argument that it is possible to identify individuals that have traits such as natural resiliency and to screen out those who do not possess the ability to use desired techniques to overcome adversity. Psychological screening techniques will be discussed in greater detail in chapter 4.

Love's second recommendation is in the realm of building resilience in the force. This author will attempt not to be redundant here as resiliency has already been discussed at length. Love has also covered the United States Army Battlemind Program and CSF program in great detail. However, Love did draw some interesting correlations between combat sports athletes who compete in close quarters, combat, and soldiers that are

training for real combat situations. Michael Gervais, a professional mixed martial arts trainer from Pinnacle Performance, uses Emotion Awareness and Regulation Training to prepare athletes for close quarters combat. This training is designed to intentionally trigger reactions from the Sympathetic Nervous System (SNS) to force the "fight or flight" reaction in fighters. "Gervais contends that the degree and duration of the physiological effects of the SNS activation are moderated by the perception of the threat" (Love 2011, 17). Simply put, negative reactions are reduced by the perception of the threat. This means that the more comfortable one is during a fight the better one will perform in the fight. The topic of the SNS in respect to training will be discussed further later in this literature review. The idea of repetitively training your body and mind for combat is extremely important and will be covered in the review of Dave Grossman's books, *On Combat* and *On Killing*.

Replicating battlefield conditions and the true nature of combat has always been one of the most difficult tasks posed to organizational leaders. How do you replicate combat conditions in a training environment in a manner that is safe enough but also worthwhile enough? Love poses that strengthening soldiers through exposure to bolster resiliency is an necessity and that "it is the commander's job to ensure their units conduct tough and realistic training that exposes their soldiers to the conditions of battle" (Love 2011, 18). It is this kind of tough realistic training that Love recommends in the form of Initiative-Oriented Training, Live Tissue Training, use of combat graphic novels, graphic media, and the testimonials of combat veterans, to combat against the "universal human phobia," which is the "powerful resistance against killing one's own kind" (Love 2011, 19). The interesting phenomenon of the universal human phobia, the relationship between

the forebrain and the midbrain, and the studies conducted by General S.L.A. Marshall in reference to the percentage of soldiers in combat that fire their weapons at human targets, was covered briefly by Love but these topics are discussed more comprehensively by Grossman.

Love offers up several leadership techniques that he determined to be contributors to “higher soldier morale and cohesion and fewer mental health problems” (Love 2011, 22). According to Love, the transactional contingent reward and transformational leadership styles, as well as the ability to admit to and joke about the fear of combat seemed to be some of the most successful techniques to establish clear standards, goals, and expectations which leads to improved morale, cohesion, and identification within an organization. Love contends that hardiness assessment and training in military organizations has also been determined to be connected with transformational leadership. “Hardiness has emerged as a set of personal characteristics that help people turn stressful circumstances from potential disasters into opportunities for enhanced performance, leadership, conduct, health and psychological growth” (Love 2011, 17).

A hardiness study of cadets at the United States Military Academy determined found that “hardiness attitudes emerged as the best predictor of transformational leadership, also known as charismatic leadership” (Love 2011, 17). The same study, although now focused on active duty soldiers in combat conditions, found “clear evidence that the higher the hardiness attitudes prior to mission, the lower likelihood of post-traumatic stress or depression disorders in life threatening stresses in military engagements” (Love 2011, 17). Love states that certain leadership techniques can absolutely have a positive effect on subordinates by “preparing soldiers for adversity

prior to or during combat" (Love 2011, 22). Hardiness is learned, so if a leader uses transformational leadership and hardiness methodology to convey a sense of meaning to a potentially traumatic event they can turn "potential disasters into growth opportunities" (Love 2011, 17).

## Resilience Under Military Operational Stress: Can Leaders Influence Hardiness?

"Resilience Under Military Operational Stress: can Leaders Influence Hardiness," an article authored by Paul T. Bartone and published in *Military Psychology Journal*, in 2006, offers some additional leadership theories in reference to hardiness and resilience. Baritone writes that "one potential pathway to resilience is personality hardiness, a characteristic sense that life is meaningful, we choose our own futures, and change is interesting and valuable" (Bartone 2006, 131). This interesting and informative article argues that "highly effective leaders can increase hardy, resilient responses to stressful circumstances within their units" (Bartone 2006, 131). Bartone believes that "leaders in military units may well be able to foster increases in the kind of cognitions and behaviors that typify the high-hardy person's response to stressful circumstances" (Bartone 2006, 132). Bartone explains that what he calls the "primary underlying mechanism" in the relationship between hardiness and resilience "involves how stressful experiences get interpreted or made sense of in the context of one's life experience" (Bartone 2006, 132). Bartone's article covers the nature of stressors, personality hardiness, personality hardiness and its relationship to positive leader influence, and research and case studies on the hardy leader influence hypothesis.

Bartone points out that the nature of stressors in modern military operations is varied but the one thing that can be certain is that stressors are always there. Obviously the military occupation is inherently dangerous but it is also necessary, meaning that the role that the military plays in society cannot be altered simply because it is a very stressful and a dangerous occupation. Bartone delves into the nature of the stressors that are experienced during military operations, so that they can be understood and dealt with (Bartone 2006, 133). The author identifies six primary dimensions of stressors in modern military operations: isolation, ambiguity, powerlessness, boredom, danger, and workload (Bartone 2006, 134). These six stressors and their characteristics are a synopsis of the combat and operational stressors that United States Army soldiers must deal with both home and abroad.

Bartone believes that through an understanding of primary stressor dimensions and personality hardiness, coupled with an understanding of how positive leadership influence can assist organizations, leaders can prepare their units for these stressors and help the unit cope with the effects of the stressors. Bartone says that, "military units by their nature are group oriented and highly interdependent," this is one of the reasons that his hardy leader influence hypothesis is so compelling (Bartone 2006, 138). This hypothesis states that "leaders who are high in hardiness themselves exert influence on their subordinates to interpret stressful experiences in ways characteristic of high-hardy persons" (Bartone 2006, 139). Additionally, Bartone states that "a hardy leader facilitates 'hardy' group sense-making of experiences, in how tasks or missions are planned, discussed, and executed, and also how mistakes, failures, and casualties are spoken about and interpreted" (Bartone 2006,145).

Bartone also discusses several other leadership theories that can contribute to hardiness in units, transformational leadership and the path-goal leadership theory. Transformational leadership has already been discussed within the content of this literature review, therefore this author will focus attention on path-goal leadership theory here. Path-goal leadership theory, like transformational leadership focuses on motivating and increasing the commitment of subordinates. This is done by assisting subordinates with "identifying significant goals, structuring situations so that subordinates experience personal rewards for goal attainment, and clarifying the pathways for achieving these goals" (Bartone 2006, 142). Leaders can use many different specific methods or styles to accomplish path-goal, the key seems to be that individual goal attainment by the subordinate motivates them and the leader involvement and assistance helps create or increase the subordinate's commitment to the organization (Bartone 2006, 142).

## Of Blue Badges and Purple Cloth: The Impact of Battle Death in a Cohesive Unit

"Of Blue Badges and Purple Cloth: The Impact of Battle Death in a Cohesive Unit," 1989, is a School of Advanced Military Studies Monograph written by Daniel G. Karis. This study examines the impacts of battle death in a cohesive unit and seeks to determine if battle death will seriously degrade the combat effectiveness of surviving soldiers in small, cohesive units. To answer this primary question the author investigates the impact of combat death on both the individual and the unit by building a theoretical foundation followed by studying cases from World War II, the Korean War, and the Vietnam War. The author then examines some contemporary training techniques used at

the National Training Center and contemplates implications for the future (Karis 1989, iii).

Karis draws upon some of the great military minds in his theoretical foundation and summarizes authors such as Sun Tzu, Clausewitz, du Picq, Keegan and Marshall. Karis believes that where all of these theorists seem to agree is that "the chief impact of death is in the will to fight" (Karis 1989, 4). According to Karis:

> Military theory suggests that the chief impact of death in a cohesive unit is in the moral domain–the will to fight. In order to maintain their combat effectiveness, small units will have to be trained to anticipate the true conditions of the battlefield. Leaders will have to maintain the cohesion of the primary group and provide for the protection for their units in a lethal environment. If they do not, the morale of the combatants will be undermined and the combat effectiveness of their units will diminish. (Karis 1989, 9)

Karis focuses primarily on combat death and small cohesive units and draws heavily from research from *The American Soldier: Adjustment during Army Life*, a study of hundreds of United States World War II veterans. This study concentrated on the concept of the "primary group," or small groupings of military personnel generally found at the squad and platoon level and determined that the average soldier perceived combat as dangerous due to their fear of death or injury. Many techniques were used by the Army to battle this fear such as an overall permissive Army attitude toward fear, battle inoculation, and training on the psychology and physiology of fear. In the end the Stouffer study found that the primary group reduced the fear of battle by providing solidarity to its members but it also found that when a primary group member became a casualty the surviving members of the group paid a heavy price psychologically (Karis 1989, 15).

Based on research on the Korean and Vietnam Wars, Karis points out that there can be both positive and negative impacts of cohesive primary groups. In both of these wars Karis noticed similarities of intense interpersonal relationships between primary group leaders and men. This extremely close connection seemed to stem from the proximity of the primary group leader to his subordinates, due to increased activity and danger which generally meant the leader was living with his soldiers. The effect of this increase of proximity meant "small unit leaders identified more with their men than with their superiors" which caused several unexpected repercussions such as sharing dissenting sentiments, potential for collective defiance, and the adjustment of group aims if a casualty was incurred prior to mission accomplishment (Karis 1989, 21). These are a few negative examples that Karis highlights in reference to strong primary group cohesion and small unit leaders (Karis 1989, 26).

Karis also briefly examined what he called the contemporary scene, the National Training Center at Fort Irwin, California. Although his opinion is somewhat outdated his point still holds true. This author has noted similarities between what Karis calls "a lack of prudence" by units at the National Training Center as well as the Joint Readiness Training Center at Fort Polk, Louisiana during his rotations at these two locations. This lack of prudence, Karis states, "is often demonstrated due to the fact that genuine terror of the life-threatening type is absent" (Karis 1989, 26). The lack of realism combined with the excitement of the training exercise sometimes leads to the notional wounded and sick being ignored or given a low priority. This lack of prudence is also demonstrated when leaders attempt to do too much or take unmitigated risks, putting themselves and their men in unnecessary danger. It is widely understood and accepted that these national

level training center rotations, are practice for deployments but organizational leaders and training center Trainer-Mentors should guard against leaders that take undue risk on the battlefield. According to Karis "the combat leader is charged with an obligation to accomplish his mission and to take care of the welfare of his soldiers. He fails on both counts if these tasks are not accomplished in his absence" (Karis 1989, 37). There is a fine line to be tread here however, Karis agrees that it is the responsibility of leaders to ensure that their unit is trained and ready to continue the fight in his absence by training subordinate leaders to step up to the next level. Karis states "the mark of the leader is not what his small cohesive unit accomplishes when he is present, but what it accomplishes when he is not" (Karis 1989, 38).

## On Killing and On Combat

*On Killing* and *On Combat*, written by Dave Grossman in 1995 and 2004 respectively, are two works in the field of the psychological, sociological, and physiological effects of combat. Grossman describes the writing of *On Killing* as "an attempt to conduct a scientific study of the act of killing within the Western way of war and of the psychological and sociological process and prices exacted when men kill each other in combat" (Grossman 1995, xxix). Grossman felt that there was a gap in learning in this specific area because all previous authors wrote about war in general, "while this is a book on the act itself: on killing" (Grossman 1995, xiii) with the ultimate objective of uncovering the dynamics of killing (Grossman 1995, xxxi). *On Combat*, on the other hand, is different than *On Killing*, "in that it is more focused toward empowering warriors to participate in the toxic, corrosive, destructive environment of combat" (Grossman 2004, xii). The author's overall goal with *On Combat* is to prepare soldiers and to send

them into battle “forewarned and forearmed” and “steel the hearts of those who must go into combat” (Grossman 2004, xii).

Grossman discusses the idea of the “Universal Human Phobia” in both of his books. He stresses that “a phobia is much more than just a fear. It is an irrational, overwhelming, uncontrollable fear of a specific object or event” (Grossman 2004, 2). This Universal Human Phobia that affects almost everyone in the world is called interpersonal human aggression. Interpersonal human aggression is based on the idea that “creatures of the same species never kill their own kind intentionally” (Grossman 2004, 195). Grossman says that “most healthy members of most species have a hardwired resistance against killing their own kind. Any species that did not have this hardwired resistance would cease to exist within a couple of generations” (Grossman 2004, 195).

People process aggression that comes from other people differently than other things such as natural disasters because “when it is another human being who causes our fear, pain and suffering, it shatters, destroys and devastates us” (Grossman 2004, 4). The topic of interpersonal human aggression is one of the foundational blocks to Grossman’s views on combat and is intertwined with some other accepted and proven theories such the role of the autonomic nervous system, which is associated with the “fight or flight” response model, the Triune Brain Model, which describes the three different parts of the brain, the forebrain, midbrain, and hindbrain and the brain functions of each, and S.L.A. Marshall’s conditioning theory.

One of Grossman’s most important points in both of his books centers on the autonomic nervous system which is made up of the SNS and the parasympathetic nervous system. The SNSs job is to prepare the body for action by providing the necessary energy

and the parasympathetic nervous system is in charge of allowing the body to relax and recuperate that energy (Grossman 2004, 14). Grossman's premise is that the "fight or flight" model that is generated from the SNS has been misapplied to the stressors of the battlefield because "the fight or flight dichotomy is the appropriate set of choices for any creature faced with danger *other* than that which comes from its own species" (Grossman 1995, 5). In *On Killing*, Grossman applies the animal kingdom intraspecies response patterns of fight, flee, posture, and submit to human warfare. Like other species, humans in threat of conflict with other humans will go through the decision making process of fleeing or posturing and when posturing fails the available options expand to fight, flight, or submission. Grossman gives several historical examples of the posturing of armies on the battlefield that resulted in the submission or flight of the opposing force. Heads of state and leaders of militaries can utilize posturing at a very large scale to dissuade their enemies and avoid conflict all together (Grossman 1995, 16).

Grossman mentions the Triune Brain Model, developed by Dr. Paul MacLean, time and again in both of his books. The Triune Brain Model breaks the brain up into three parts, the forebrain, the midbrain, and the hindbrain. The forebrain is the logical part of the brain which allows people to make rational, sound decisions. The midbrain is the primitive, or mammalian, part of the brain that is just like any other animals. The midbrain is the reflexive, instinctive, and intuitive part of the brain. The hindbrain is the part of the brain that handles things that take no conscious thought like heart rate and respiration (Grossman 2004, 43). Grossman puts it all together with the following statement, "when a man is frightened, he literally stops thinking with his forebrain and begins thinking with his midbrain" (Grossman 1995, 8). In war men slam directly into the

Universal Human Phobia, the fear of interpersonal human aggression, that unthinkable fear of doing harm to another human being. This fear causes many physiological reactions in the body, one of which is an elevated heart rate. When a person's heart rate elevates to a certain point because of a fear reaction, the forebrain shuts down and the midbrain takes over, the instinctual part of the brain that "shows a consistent trend towards resisting and avoiding the killing of one's own species" (Grossman 2004, 195).

Marshall, during his study of the firing rate of soldiers in World War II, determined that 85 percent of United States Army soldiers did not fire their weapons at the enemy. Through interviews, questionnaires, and survey's Marshall found that "only 15 to 20 percent of riflemen fired their weapons at an exposed enemy soldier," however, "if there was a leader present ordering soldiers to fire, then almost everyone would do so. Likewise, a crew served weapon, with a gunner and assistant gunner fighting together, almost always fired. But when soldiers were left to their own devices, the vast majority of them could not kill" (Grossman 2004, 74). Through extrapolation of various data from past wars historians and scientists have determined that Marshall's findings in World War II apply as far back as the first muskets used in war. Grossman points out that the truth of the matter is that "it is hard to get people to kill" (Grossman 2004, 73).

> That the average man will not kill even at the risk of all he holds dear has been largely ignored by those who attempt to understand the psychological and sociological pressures of the battlefield. Looking another human being in the eye, making an independent decision to kill him, and watching as he dies due to your action combine to form the single most basic, important, primal, and potentially traumatic occurrence of war. If we understand this, then we understand the magnitude of the horror of killing in combat. (Grossman 1995, 31)

Marshall's major recommendation to correct the unacceptably low firing rate from World War II was to change the use of the Bull's eye targets used during that era to

more realistic targets and more realistic combat situations. These recommendations led the Army to create and utilize man shaped target silhouettes and realistic photo targets during training. This increase of realism in training has been attributed to the increase in the firing rate of soldiers in the Vietnam War to a 95 percent firing rate, an 80 percent increase from the firing rate of World War II (Grossman 2004, 75). The training methods used to increase the firing rate can be equated to the "conditioning" of soldiers to kill by putting them in more realistic training environments so when the time comes and the Universal Human Phobia hits them in mind and body and the midbrain seizes control, the conditioning takes over instead of the instinct and the soldier is able to kill.

It is this type of realistic training that can also assist soldiers in continuing their duties during combat, even when their peers are being wounded and killed around them. Grossman has compiled numerous strategies and techniques in his two books to assist and condition "warriors" in combat such as stress inoculation, stress acclimatization, combat fear inoculation, understanding of the physiological impacts of fear, understanding perceptual distortions in combat, and the use of tactical breathing and critical incident debriefings. These strategies and techniques will be discussed at length in chapter 4.

## Warrior Mindset: Mental Toughness Skills for a Nation's Peacekeepers

*Warrior Mindset: Mental Toughness Skills for a Nation's Peacekeepers*, 2010, is a book written by Michael J. Asken, Dave Grossman and Loren W. Christensen. These three authors compile or create "concepts and techniques [that] are meant to be integrated with other training such as stress exposure training or scenario-based training" (Asken,

Grossman, and Christensen 2010, xvi). The goal of *Warrior Mindset* is to "provide military, police and their leaders with a foundation in the psychological skills of mental toughness that promotes optimal response, especially in high stress missions and operations" (Asken, Grossman, and Christensen 2010, xii). The author's definition of mental toughness is:

> Possessing, understanding, and being able to utilize a set of psychological skills that allow the effective, and even maximal execution or adaptation, and persistence of decision-making and physical and tactical skills learned in training and by experience. Mental toughness expresses itself every day, as well as in high stress, critical situations. (Asken, Grossman, and Christensen 2010, x)

The importance and relevance of this book is that helps describe "the process of accomplishing, or the psychological steps needed to achieve the ultimate goal of enhancing survival" (Asken, Grossman, and Christensen 2010, vii). It is the authors standpoint that "even when the importance of psychological skill is recognized, it's often true that training on how to succeed psychologically, as well as physically, is not taught consistently" (Asken, Grossman, and Christensen 2010, vii). It is the question of "how to train" that Asken, Grossman and Christensen have focused on in this book. The author's use a sports analogy to describe the difference of telling someone to do something versus teaching them how to do it, they say "it is much like a coach telling players to 'put the ball in the basket,' without training the skills on how to pass, shoot, or dribble; that is, training how to put the ball in the basket" (Asken, Grossman, and Christensen 2010, vii). These psychological methods of "how to train" have also had an effect on attitudes that favor the "just get over it" or "deal with it" mentality and replaced them with "training on how to get over it or deal with it" (Asken, Grossman, and Christensen 2010, ix).

Some of the critical benefits that can come from the concepts and techniques from *Warrior Mindset* are:

1. Maximizing the quality of individual skills and overall response of military and police officers and personnel.
2. To enhance the confidence of officers and personnel in handling the many different types of situations and decisions they face.
3. To keep skills fresh.
4. To provide a foundation for excellence in performance in any area of human endeavor and achievement. (Asken, Grossman and Christensen 2010, xv)

Warrior Mind set is an effort to assist warriors to achieve "mental toughness, grace under fire, and nerves of steel" (Asken, Grossman, and Christensen 2010, forward). The authors state that "this mastery will not come as a byproduct of physical training, but rather through training explicitly designed to develop, hone and expand the mental toughness of every single man and woman in uniform" (Asken, Grossman, and Christensen 2010, forward).

## References that Address Organizational Preparation for Casualties

This author conducted an honest and thorough search for references that address the specific topic of organizational preparation for casualties but was unable to find any specific references on the subject. Some of the references that have already been included in this literature review discuss some general organizational strategies for preparing for fear, stress, resiliency, and hardiness. Others stressed the importance of inoculation and conditioning to reinforce training and assist units in building a cohesive team. This author has attempted to extract the necessary information from the references already discussed and apply it to the analysis in chapter 4.

## Summary

The literature review clearly identifies the extreme importance of the challenges that exist in reference to combat related casualties within United States Army combat organizations. The goal of the literature review was to identify research that focused on strategies and techniques, that will enable Army combat organizations to prepare for the realities of combat and continue to function admirably during and after combat. The first major concern addressed in this chapter was defining what is actually considered to be a casualty according to United States Army doctrine. To do this the literature review briefly examined the Army Health System and the Army health service support and sustainment considerations that United States Army combat organizations must contend with. The next section of the literature review concentrated on references that address soldier and leader techniques that prepare for the occurrence of casualties. These techniques vary from methods to help reduce or minimize the adverse effects of combat and operational stress to techniques that focus on psychological and physical resilience and hardiness. The final section of this review concentrated references that address Army organizational preparation for casualties. This author was unable to locate any specific references that addressed the subject directly. A comprehensive study of these problems and concerns should point to plausible solutions to incorporate into Army combat organizations and help alleviate the friction caused by unfortunate but inevitable casualties.

# CHAPTER 3

# RESEARCH METHODOLOGY

This thesis consists of a qualitative analysis, more specifically described as a content analysis, to research and answer the primary question of how can United States Army combat organizations better prepare for the inevitability of casualties. This qualitative research effort seeks to identify effective strategies and techniques to assist United States Army combat organizations to prepare for the inevitability of casualties by answering the following secondary research questions: (1) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) What can be done to assist United States Army combat organizations to execute their duties once there has been a casualty? Standards of quality and validity are met within this research effort by utilizing the peer review and data analysis technique by analyzing documents and material culture.

## Qualitative Research

According to Catherine Marshall and Gretchen B. Rossman, authors of *Designing Qualitative Research*, 2006, "qualitative research is pragmatic, interpretive, and grounded in the lived experiences of people" (Marshall and Rossman 2006, 2). Michael Quinn Patton, author of *Qualitative Evaluation and Research Methods*, 1990, states that "qualitative methods consist of three kinds of data collection: (1) in depth, open ended interviews; (2) direct observation; and (3) written documents" (Patton 1990, 10). Patton describes some of the benefits of document analysis which "yield[s] excerpts, quotations, or entire passages from organizational, clinical, or program records; memoranda and

correspondence; official publications and reports; personal diaries; and open ended written responses to questionnaires and surveys" (Patton 1990, 10).

Within the social sciences the definition of qualitative research and the terms used to describe this type of research can vary but practitioners of the social sciences do agree that there are certain general characteristics within qualitative research. Robert C. Bogdan and Sari Knopp Bilken, authors of *Qualitative Research for Education: An Introduction to Theory and Methods*, 1992, state that "we use qualitative research as an umbrella term to refer to several research strategies that share certain characteristics" (Bogdan and Bilken 1992, 2). Marshall and Rossman say that there are five characteristics of qualitative research: it "(a) is naturalistic, (b) draws on multiple methods that respect the humanity of participants in the study, (c) focuses on context, (d) is emergent and evolving, and (e) is fundamentally interpretive" (Marshall and Rossman 2006, 2). With all of that being said, qualitative research can be defined as "a broad approach to the study of social phenomena. Its various genres are naturalistic, interpretive, and increasingly critical, and they draw on multiple methods of inquiry" (Marshall and Rossman 2006, 2). The nature of the problem discussed in this thesis is grounded in the human condition and lends itself towards the methods found in qualitative research.

## Content Analysis

According to Patton, "the validity and reliability of qualitative data depend to a great extent on the methodological skill, sensitivity, and integrity of the researcher" (Patton 1990, 11). Patton describes content analysis "as the process of identifying, coding, and categorizing the primary patterns in data" (Patton 1990, 381) and goes on to say that "content analysis requires considerably more than just reading to see what's

there" (Patton 1990, 11). Marshall and Rossman explain that content analysis is "the use of documents that often entails a specialized analytical approach" (Marshall and Rossman 2006, 108).

Material that is used within a content analysis can be of varying natures. Any written material can be used as raw data for content analysis as can any other form of communication to include music, pictures, and various other mediums. One of the strengths in the use of content analysis is that "the procedure is relatively clear to the reader. Information can therefore be checked, as can the care with which the analysis has been applied" (Marshall and Rossman 2006, 108). One of the weaknesses, however, is that "the content of the written materials or film, for example, entails interpretation by the researcher," in other words, the way the researcher looks at the material can be considered subjective (Marshall and Rossman 2006, 108). Marshall and Rossman warn researchers by stating "care should be taken, therefore, in displaying the logic of interpretation used in inferring meaning from the artifacts" (Marshall and Rossman 2006, 108). The author has taken this advice into account while using content analysis to research United States Army field manuals, scholarly works and books, United States Army Command and General Staff College Master of Military Arts and Science theses and School of Advanced Military Studies monographs, Naval Postgraduate School MBA Professional Reports and United States Army War College strategy research projects in order to answer the primary and secondary questions.

## Standards of Quality and Validity

Marshall and Rossman emphasize that during qualitative study, in many cases, there are advantages in the use of unobtrusive measures, which do not necessitate the

cooperation of the subjects of the study, because they are “nonreactive” in nature. This author has utilized the data analysis and peer review techniques as standards of quality and validity for this thesis. Marshall and Rossman also state that “qualitative analysis encompasses data organization, theme development and interpretation, and report writing” (Marshall and Rossman 2006, 154). This researcher has used an immersion strategy to configure the categories of data that are evident in chapter 4, meaning that there were no preconfigured categories prior to the research. Marshall and Rossman describe immersion strategies as “categories that are not prefigured and which rely heavily on the researcher’s intuitive and interpretive capacities” (Marshall and Rossman 2006, 155). Marshall and Rossman describe this overall strategy as being “closer to the interpretive/subjectivist end of the continuum than the technical/objectivist end” and explain that “the interpretive act brings meaning to the data and displays that meaning to the reader through the written report (Marshall and Rossman 2006, 155, 157). Merriam provides six methods to improve the internal validity of a qualitative report: triangulation, peer examination, researcher’s bias, member checks, long-term observation, and collaborative modes of research (Merriam 1998, 204-205). Merriam goes on to describe peer examination as “asking colleagues to comment on the findings as they emerge” (Merriam 1998, 204). Faculty and students at the United States Army Command and General Staff College provided feedback that validates the standards of quality in this thesis.

## Summary

This thesis uses the qualitative research methodology to study the phenomena of combat casualties within United States combat organizations. Because “qualitative

research is pragmatic, interpretive and grounded in the lived experiences of people" the author believed that qualitative research technique would complement the thesis topic (Marshall and Rossman 2006, 2). Patton highlights that "qualitative methods permit the evaluation researcher to study selected issues in depth and detail" in contrast to more quantitative methods that have a wider breadth but lack substance (Patton 1990, 187). The author utilized content analysis to review and research United States Army field manuals, scholarly works and books, Master of Military Arts and Science theses and School of Advanced Military Studies monographs, Naval Postgraduate School MBA Professional Reports and United States Army War College strategy research projects in order to answer the primary and secondary questions. The data analysis and peer review methods were utilized to "ensure that data from different sources was used to corroborate, elaborate, or illuminate the research in question" (Marshall and Rossman 2006, 203). The author's desired end state for this thesis is to enable organizational leaders to understand and incorporate strategies and techniques that will assist them in preparing their units for the realities of combat.

# CHAPTER 4

# ANALYSIS

This qualitative thesis proposes to answer the primary research question of how can United States Army combat organizations better prepare for the inevitability of casualties. Additionally this chapter is designed to answer the following secondary research questions: (1) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) What can be done to assist United States Army combat organizations to execute their duties once there has been a casualty? This thesis will enable organizational leaders to understand and incorporate strategies and techniques that will assist them in preparing their units for the realities of combat.

## What Can Be Done to Better Prepare United States Army Combat Organizations Prior to the Occurrence of Casualties?

### Understanding Fear and Stress

In chapter 1 this thesis discussed the human dimension, the effects of fear in United States Army combat organizations, and how this influences the will to fight. How can soldiers' combat fears such as the fear of being killed or horribly wounded, the fear of seeing a best friend shot dead on the battlefield, the fear of failing in the face of battle and letting the unit down, or the fear of interpersonal human aggression-of killing? It should be the goal of every Army leader to prepare their soldiers and send them into battle "forewarned and forearmed" and it should be the goal of every soldier in the Army to do everything it takes to be ready. To do this leaders and soldiers must first understand fear and the effects of fear if they are to win over it.

Fear is one of the many types of combat stressors that soldiers must deal with on a daily basis. A combat stressor is an incident that has the potential to significantly impact the unit or soldier experiencing it. It is important to understand that fear is "an automatic emotional reaction to a perceived danger or threat characterized by a high state of arousal (Asken, Grossman, and Christensen 2010, 77). Asken, Grossman, and Christensen describe fear as being the "ultimate stress" because "it involves excessive arousal that can inhibit effective functioning" (Asken, Grossman, and Christensen 2010, 78). The effects of fear are physiological in nature and can wreak all kinds of havoc on the body specifically at times where total control is needed. The interesting thing here is that fear also has some positive aspects to it and can be a necessity. "Fear is our emotional equivalent of warning lights [and can] signal the need for caution in certain situations" (Asken, Grossman, and Christensen 2010, 78).

The primary effect of fear is the elevation of the heart rate. According to Grossman, there are five different psychological conditions categorized to a person's hormonal, or fear induced, heart rate resulting from SNS arousal and these conditions are linked with different performance levels. These psychological conditions are condition white, yellow, red, gray, and black. Grossman emphasizes that (see figure 3 below)

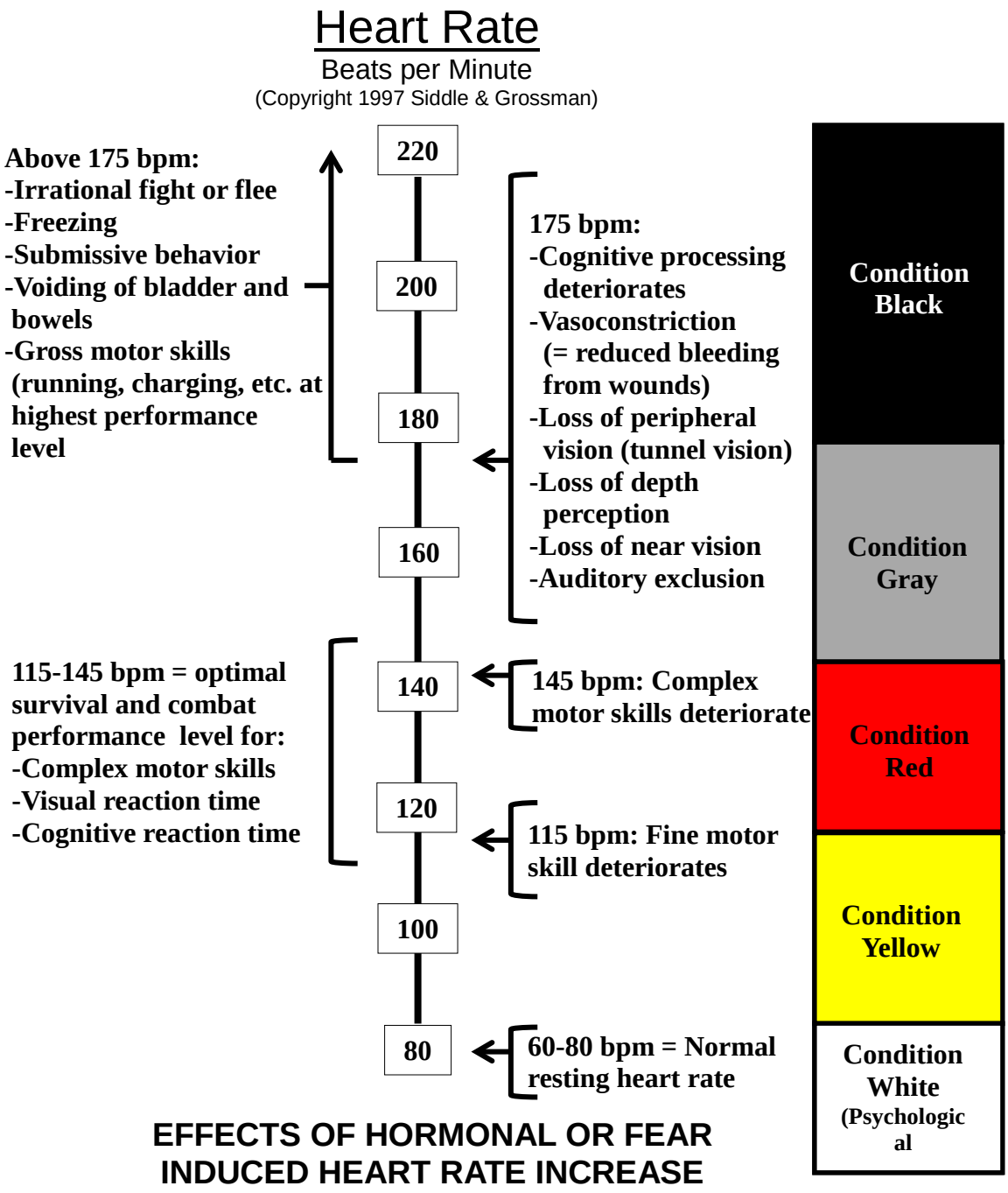


Figure 3. Effects of Hormonal or Fear Induced Heart Rate Increase

*Source*: Dave Grossman with Loren W. Christensen, *On Combat: The Psychology and Physiology of Deadly Conflict in War and Peace* (Belleville, IL: PPCT Research Publications, 2004), 31.

The heart rate increase due to fear and a heart rate increase due to physical exercise are not the same thing and should not be treated as such. Grossman states that "using physical exercise to increase your heart rate is an excellent technique to simulate the effects of combat stress. But we must remember that the powerful effects of someone trying to kill you are not something we can replicate in training" (Grossman 2004, 44).

According to Grossman's explanation, condition white is associated with a normal resting heart rate between 60 and 80 beats per minute which he describes as the lowest level of readiness. Condition yellow occurs when a person's level of arousal is elevated and their fear induced heart rate increases to somewhere between 80 and 115. When this happens the body becomes more alert and prepares itself for combat, both psychologically and physiologically. This is that "fear warning light" and without it people would not be mentally and physically prepared to deal with whatever dangerous stimuli that is threatening them. Grossman describes that it is vital for certain warriors to remain in condition yellow and not progress to condition red. Some examples he gave are pilots, snipers, hostage negotiators, and bomb technicians. The reason cited was because when someone hits the condition red threshold they begin to lose their fine motor skills and when the fine motor skills go the ability to operate very precise and technical equipment plummets.

Condition red is reached when a person's fear induced heart rate increases to somewhere between 115 and 145 beats per minute. Grossman calls this "the optimal survival and combat performance level" and recommends that soldiers and policeman conducting direct action operations need to operate in condition red because they need their cognitive and visual reaction time, and complex motor skills operating as efficiently

as possible (Grossman 2004, 33). As previously mentioned there will be some loss of fine motor skills in condition red but this is compensated for “through intense, high repetition training” or “muscle memory” (Grossman 2004, 33). Condition gray is where performance levels begin to significantly break down for most people. Condition gray occurs when the fear induced heart rate elevates to between 145 to 175 beats per minute. Grossman does state that there are some exceptions that he has identified in professional athletes and professional marksmen that have conditioned themselves to operate in condition gray at an optimal level versus where most people reach their optimal level in condition red.

The final condition is condition black, a fear induced heart rate above 175 beats per minute, which causes a “catastrophic breakdown of mental and physical performance” (Grossman 2004, 35). When a person reaches condition black their forebrain is no longer in control and the animalistic midbrain takes over. Leaders and soldiers must make every attempt to avoid condition black and train in condition red, so when the time comes they are ready to perform to the best of their ability. This type of training is called conditioning and will be discussed later.

Karis cites a study that concentrated on strategies used by ground combat officers and aviators to manage their fears in life threatening combat conditions. The study was conducted using highly decorated Vietnam War veterans that had been awarded the Silver Star, Distinguished Service Cross, the Vietnam Cross of Gallantry or the Congressional Medal of Honor. In the study five categories of fear management were used: religious orientation, denial, avoidance, displacement, and counter-control (Karis 1989, 24). Religious orientation was related to if the subject had a belief in God. The

denial category had to do with the subject refusing to admit the fear of death all together. Avoidance was defined as limiting the risk of being faced with fear in any way possible. Displacement was the technique of funneling efforts into something that is acceptable to society such as the unit or mission to deal with the fear. Finally, counter-control was the "use of a variety of defense mechanisms to replace thoughts of fear, including aggression, rationalization, calculation, and confidence" (Karis 1989, 24). Displacement seemed to be the category of fear management preferred by the combat veterans that participated in the study. The study also found that "the need to prepare for combat was important, and a recommendation was made to teach soldiers strategies for dealing with death in combat" (Karis 1989, 25). The study further recommends that "the Army should determine the coping strategies used by successful combat veterans and then teach these strategies to soldiers who then have tools to deal with the death situation and the feelings that develop" (Karis 1989, 25).

Bethea completed a study on ways to reduce combat stress utilizing leadership and training techniques. There seem to be correlations between the subject of combat stress in the United States of America's ground combat forces and the topic of this thesis, preparing United States Army combat organizations for the inevitability of casualties. The idea that leadership and training techniques can be used to reduce combat stress in combat organizations will be built upon in this thesis because as is stated in Bethea's study, derived from Department of the Army Field Manual 6-22.5, *Combat and Operational Stress Control Manual for Leaders and Soldiers*, 2009, "Combat stressors include singular incidents that have the potential to significantly impact the unit or soldier's experiencing them" (Department of the Army 2009c, 1-2). Some of the primary

examples of combat stress given were personal injury, killing of combatants, witnessing the death of an individual, death of another unit member, and injury resulting in the loss of a limb. Operational stressors "may include multiple combat stressors or prolonged exposures due to continued operations in hostile environments" (Department of the Army 2009c, 1-2). Examples of operational stressors are prolonged exposure to extreme environments (hot or cold), long separations from family, and exposure to multiple combat stressors over an extended period of time" (Department of the Army 2009c, 1-2). It is apparent by the definitions and examples of combat and operational stressors that there is a close relationship between incurring a casualty in a combat organization and the combat stressors that occur before and after a soldier becomes a casualty. One can cause the other and vice-versa.

Bethea's recommendations to help reduce combat stress in United States Army ground forces span across three phases. The first phase is the pre-deployment and mobilization phase, the second phase is the deployment and employment phase, and the third phase is the redeployment and reintegration phase (Bethea 2010, 138). During the pre-deployment and mobilization phase Bethea has three recommendations: units should conduct focused full spectrum training in preparation for combat deployments, the unit's pre-deployment training plan should achieve brilliance in the basics and focus on theater required training, and units should focus on the mental and emotional preparation of soldiers by ensuring positive relationships between leaders, soldiers, and families (Bethea 2010, 140). Bethea provides four recommendations for the deployment and employment phase: units should always fight as a combined-arms team; ground forces should always operate with a clearly defined mission, intent, and purpose which is provided in a

complete operations order, leaders should always take the physiological factors of terrain into account and ensure that subordinates fighting loads are inspected prior to operations and that a good battle rhythm is established that encompasses a rest and refit cycle, and combat leaders should lead from the front and ensure good situational understanding of the area of operations by being with the forward troops (Bethea 2010, 142). Bethea provides several recommendations for the redeployment and reintegration phase. Most importantly this phase must be methodically planned well before it is executed. This phase should include a "welcome home ceremony for soldiers and families, a ten day decompression process, post deployment block leave, and then a post deployment routine" (Bethea 2010, 143).

In his study Bethea gathered multiple techniques and interventions that are effective in reducing combat stress. These are existing techniques that are currently in use in the United States Armed Forces.

> According to the Department of Defense Directive Number 6490.5 *Combat Stress Control (CSC) Programs*, the prevention and management of Combat Stress Reaction strive to 'preserve mission effectiveness and warfighting, and to minimize the short-and long term adverse effects of combat on the physical, psychological, intellectual, and social health of service members'. The methods and activities that are most effective in reducing combat stress consist of: the Brevity Immediacy, Centrality, Expectancy, Proximity, Simplicity (BICEPS) principles of combat stress management; the six Rs (Reassure, Rest, Replenish, Restore, Return, and Remind) actions for combat and operational stress control; the PIES (Proximity, Immediacy, Expectancy, Simplicity) forward psychiatry treatment principles; conducting Combat Operational Stress First Aid; Cognitive Behavioral Training; and increasing resilience. (Bethea 2010, 121)

This author will not detail each of these techniques but thought it necessary to mention some of the existing methods that are currently being utilized in United States combat organizations to treat individuals suffering from the stress induced effects of incurring casualties in combat. Cognitive behavioral training is very similar to the concepts that

Asken, Grossman, and Christensen discuss in their book *Warrior Mindset* and increasing resiliency has been described in Lopes' Masters in Military Arts and Science thesis and Bartone's article.

Broadnax has determined that training and education must be a large part of the solution to the adverse effects of combat and operational stress. Broadnax states that it is the arena of education and prevention that the military needs vast improvement (Broadnax 2008, 40). Several recommendations came out of "Combat and Operational Stress: Minimizing its Adverse Effect on Service Members," first, the author says that leaders must identify the risk factors of combat and operational stress on service members, and second, the Department of Defense should institute a formal education program on combat and operational stress for leaders and soldiers (Broadnax 2008, 41). It is Broadnax's assessment that the military has focused all of its formalized training on combat and operational stress on its medical personnel and chaplains whereas the military should shift this education to include leaders and soldiers as well. Broadnax recommends that all initial entry training, non-commissioned officer training and officer education training systems should include classes on combat and operational stress (Broadnax 2008, 42).

Broadnax's recommendations to help reduce combat stress in the United States military also spans across three phases. The first phase is the pre-deployment phase, the second phase is the deployment phase, and the third phase is the post-deployment phase. During the deployment phase the author places the majority of emphasis on establishing a healthy family readiness group within military units. Broadnax identified that it is problems at home that can have a huge impact on service members during combat

operations and that family readiness groups (FRG) can relieve the majority of friction that comes from this separation.

During the pre-deployment phase the author states that keeping service members and their families informed about the deployment is important and the utilization of the family readiness group to do this is key. Broadnax also describes the use of Combat Stress Teams during the deployment phase down at the organizational level when necessary to prevent or minimize the effects of combat and operational stress. During the post deployment phase Broadnax stresses the importance of the availability and access to care. Broadnax determined that re-integration and post-deployment briefings as well as periodic screenings help relieve the effects of combat and operational stress and help identify those service members that need additional help (Broadnax 2008, 44).

## Symptoms and Reactions

If fear is the "ultimate stressor" what are some of the other stressors that can be encountered, their symptoms, and how are they related to the different psychological conditions and their reactions? In *Leadership and Training Techniques to Help Reduce Combat Stress in the United States Ground Combat Forces* Bethea compiled an abundance of information on combat stress. In his study Bethea describes mild, common, and severe combat stress reactions in soldiers that were derived from Field Manual 6-22.5. Combat and operational stress is generated from combat and operational stressors in the form of single or multiple potentially traumatic events. These combat and operational stressors will drive soldiers to display combat and operational stress behaviors that are either an adaptive reaction or a negative combat and operational stress reaction. Depending on whether there is a positive or negative reaction behavior, the

soldier will experience post-traumatic growth or may suffer from post-traumatic stress disorder.

Some additional types of combat stressors are personal injury, killing of combatants, witnessing the death of an individual, the death of another unit member, or an injury resulting in the loss of a limb (Bethea 2010, 67). Some examples of operational stressors are prolonged exposure to extreme temperatures, sleep deprivation, boredom, reduced quality of life, prolonged separation from family, and challenges to one's core belief's (Bethea 2010, 67). There seems to be some similarities between the mild, common, and severe stress reactions and physiological reactions that occur during the five psychological conditions. Some of the mild stress reactions are trembling, jumpiness, pounding heart, nausea and diarrhea, and anxiety and indecisiveness (Bethea 2010, 79). These mild stress reactions seem to align with what is occurring during condition yellow, there is increased fear but there has not yet been any loss of control (Grossman 2004, 31). Some common stress reactions are shaking and tremors, digestive and urinary symptoms, visual and hearing problems, partial paralysis, sensitivity to warning stimuli, hyper-alertness and anxiety (Bethea 2010, 79).

These common stress reactions are similar to what is occurring during condition red, there has been a loss of fine motor control (Grossman 2004, 31). Some examples of severe stress reactions are the shakes or trembles, inability to see, hear, or feel, freezing under fire or immobility, memory loss, and seeing or hearing things that do not exist (Bethea 2010, 80). These severe stress reactions line up with what occurs during condition gray, perceptual distortions can occur such as cognitive processing deterioration, vasoconstriction, loss of peripheral vision, loss of depth perception, loss of

near vision, and auditory exclusion (Grossman 2004, 31). Some additional severe stress reactions are flinching and ducking at sudden sound and movement, crying easily, panicking and running under fire (Bethea 2010, 80). These severe stress reactions seem to equate with what occurs during condition black such as, irrational fight or flee, freezing, submissive behavior, and the voiding of the bladder and bowels (Grossman 2004, 31).

Perceptual distortions are physiological symptoms of fear that can occur during combat "that alter the way the warrior views the world and perceives reality" (Grossman 2004, 54). Vasoconstriction should be discussed first because of its relationship to the other forms of perceptual distortion. As fear induced reactions cause an increase in heart rate the body begins to prepare itself for action. One of the way's the body does this is by storing more blood in the body core and large muscle groups than in the extremities. This is the body's way of protecting itself if an injury occurs, "your body becomes almost a layer of armor, and as long as an artery is not hit, you can take extensive damage without much blood loss" (Grossman 2004, 46). A person that is suffering from vasoconstriction can sometimes be identified by their pale face or lack of color because they have literally turned white with fear.

One of the prices that are paid by this phenomenon is the loss of the fine motor skills during condition red and the loss of complex motor skills during condition gray. The loss of motor control during vasoconstriction is due to the restriction of blood flow to the extremities. Grossman explains that "tunnel vision and auditory exclusion appear to involve both psychological biochemical changes in the eye and ear. We need much more research on this topic, but the dominant theory at this time is that these biochemical

changes to the sensory organs are a side effect of vasoconstriction and other stress responses" (Grossman 2004, 54).

The losses of peripheral vision (tunnel vision), depth perception (threat looks closer than it is), and near vision (unable to see close things) are unfortunate side effects of vasoconstriction that generally occur during condition black. Grossman states that this has been described as literally becoming "so scared that you can't see straight" (Grossman 2004, 47). One can probably imagine that not being able to see properly during combat can be somewhat problematic. The same can be said for instances of auditory exclusion where the body changes how a person hears things. These changes in auditory perception take the form of exclusion where sounds are diminished and intensification where sounds are amplified. Grossman states that "auditory exclusion (like most of tunnel vision) is a matter of cortical perception. The ears still hear and the eyes still see, but as it focuses on the survival mission, the cortex of the brain is screening out awareness of what it deems insignificant to the goal" (Grossman 2004, 57). This is the body's way of screening out sounds that aren't important to the mission or intensifying sounds that are.

## Conditioning and Inoculation

Soldiers can be protected from the horrors of casualties during combat long before they are required to step on an actual battlefield. This process has been called many things by many different authors, such as inoculation, psychological inoculation, stress inoculation, combat fear inoculation, battle inoculation, strengthening through exposure, brainwashing etc., but this author believes that it all comes back to one thing, conditioning. S.L.A. Marshall's findings and recommendations in reference to the firing

rate by the United States Army in World War II was already discussed during the literature review but this author would like to expand on this topic. Conditioning is an absolute necessity if United States combat forces are to operate effectively during combat. Either accidentally or intentionally (it's unknown which) the United States Army began using classical and operate conditioning after World War II. Grossman explains that "what is important to us is to understand that this process of inoculation is exactly what occurs in boot camps and in every other military school worthy of its name. When raw recruits are faced with seemingly sadistic abuse and hardship they are, among many other things, being inoculated against the stresses of combat" (Grossman 1995, 82). Rifle marksmanship is one of the best examples available to explain the conditioning process.

Marshall's recommendation of using lifelike targets is only part of the conditioning process. Soldiers are being taught to engage enemy targets reflexively, without the necessity of conscious thought. Grossman states that "in addition to traditional marksmanship, what is being taught in this environment is the ability to shoot reflexively and instantly and a precise mimicry of the act of killing on the modern battlefield" (Grossman 1995, 254). This "reflexive" aspect of the conditioning is reinforced by utilizing immediate feedback like electric pop-up targets or balloon target dropping immediately when hit and soldiers are rewarded or punished on their performance. Rewards can include recognition by superiors and peers, pass and leave privileges and marksmanship badges. Punishments can be in the form of verbal rebuffs, physical details and extra work, retraining, and possibly recycling or failing a course (Grossman 1995, 254). Although this example explains how to essentially make soldiers

more efficient killers, operate conditioning can be used to inoculate soldiers so they are prepared for the casualties that occur during combat.

The ultimate goal of conditioning is to reach "muscle memory" or what Grossman calls "autopilot." Grossman describes the goal of warriors that use conditioning to train their combat skills:

> Through intense, high-repetition training, he will turn the skills that he needs to perform into "muscle memory." Magazine changes, misfeed drills, weapons handling, and handcuffing are just a few of many skills he must rehearse until he can perform these intricate tasks flawlessly, without conscious thought. (Grossman 2004, 33)

Remember, it is very important to be conditioned to be able to do these different types of actions during a fear induced condition red where the fine motor skills have broken down. If combat related actions are not repetitively trained, muscle memory will not be built and the task will not be executed properly during elevated psychological conditions. Grossman calls this kind of conditioning stress inoculation. Grossman also stresses that "when learning skills and ingraining them as muscle memory or autopilot responses, it is important that only one way be taught" (Grossman 2004, 37). If more than one way is taught or if a soldier is taught a task incorrectly it leads to confusion and poor execution.

If the brain is not conditioned properly the proper muscle memory will not occur. Grossman describes this phenomenon as "bad muscle memory or training scars which are scar tissue in the midbrain that is counterproductive to survival" (Grossman 2004, 71). Grossman references the "law of specificity" from the biomechanics and kinesiology disciplines which essentially means "whatever is drilled in during training comes out the other end in combat" (Grossman 2004, 72). Grossman tells the story of a young marine who told him that "my old Gunny taught me that in combat you do not rise to the

occasion, you sink to the level of your training" (Grossman 2004, 74). This is why Grossman feels that "there must be a continual effort to develop realistic simulations training so the warrior develops a set of skills that will transfer to reality" (Grossman 2004, 73).

> An important part of what we achieve through stress inoculation is cognitive. The student's experience in training helps to take some of the surprise out of it when the real situation arises. Effective training also elevates the student's sense of confidence, which is another cognitive aspect of stress inoculation. The sense of personal effectiveness and self-confidence created by realistic training is as much a stress reducer as when the muscles go on autopilot. (Grossman 2004, 36)

Grossman also describes what his colleague, Gavin de Becker, has defined as combat fear inoculation. The technique used to exercise combat fear inoculation was by requesting the cooperation of police attack dogs. The members of de Beckers organization all became attack dog victims by donning the appropriate protective gear and allowing attack dogs to have their way with them. Grossman explains that "a true, deranged, killing rage can only be experienced and inoculated against in this manner, since trainees always know that a rational trainer will not intentionally commit an act that will seriously injure them" (Grossman 2004, 38). This is why the use of paint filled plastic bullet simulated munitions are useful during training. "These bullets hurt when they hit, which is desirable because pain and the possibility of pain makes this training a form of stress inoculation" (Grossman 2004, 34).

On a similar note the idea of stress inoculation can also be attributed to the United States Modern Army Combatives Program (MACP). Combatives training is absolutely combat focused and has gone through multiple revisions based on constant input from operational units throughout the Army. Modern Army Combatives Program training uses stress inoculation. Soldiers are required to fight your peers using the techniques that have

been taught (using safety equipment of course) with the threat that opponents are physically trying to harm you. This author is a tactical combatives instructor (level IV) and has fought many bouts in combatives school and in combatives competitions and can attest that combatives training has the unique ability to induce fear and inspire confidence. This is connected to the SNS fight or flight response. The more comfortable a soldier is during a fight the better the soldier will perform and the more the soldier fights the better the soldier will be. Grossman has observed that "stress inoculation in one area makes it easier to quickly adapt to a new stressor" and believes that there is "a kind of 'stress immune system', which permits you to get better and better at adapting to new stresses" (Grossman 2004, 39).

In his monograph, Karis explains that during World War II the United States Army attempted to minimize potential disruptive fear reactions (from death and injuries) by adopting a "permissive attitude" towards fear. Because of this permissive attitude toward fear and stress soldiers were not persecuted or called cowards when the effects of combat overwhelmed them and were treated as a legitimate casualty. History has shown that handling casualties that suffer from combat and operational stress reactions like this allows a quicker recovery and a higher percentage of soldiers will return to duty. During this era the Army also instituted what they called "battle inoculation."

The battle inoculation training program allowed the Army to "condition soldiers to deal with the circumstances they would experience in life threatening situations" (Karis, 1989, 12). Karis says that "training to prepare soldiers to cope with specific dangerous situations was done by educating them in the psychology and physiology of fear" (Karis 1998, 12). This type of training was recommended by veterans who assessed

that “the lack of adequate exposure to battle stimuli prior to entering combat was a major deficiency” in the Army’s training methodology. One of the primary examples given by Karis to accomplish battle inoculation was the use of infiltration courses by basic training organizations. Infiltration courses utilize live machine gun fire over the heads of trainee’s and simulate incoming artillery while they negotiate through multiple realistic battlefield obstacles. Having negotiated infiltration courses as a young Private First Class and as an inexperienced Second Lieutenant, this author can attest to their value in preparing soldiers for combat. Karis goes on to say that the “knowledge of the general nature of the anticipated experience tended to reduce its impact” (Karis 1998, 13).

In his research project on psychological resilience, Love, recommends some techniques to psychologically inoculate soldiers for combat. He characterized this psychological inoculation as strengthening soldiers through exposure. Love adamantly argues that “it is the commander’s job to ensure their units conduct tough and realistic training that exposes their soldiers to the conditions of battle” (Love 2011, 18). Love recommends that a combination of initiative-oriented training, live-tissue training, and the use of graphic novels as combat primers can help better prepare soldiers and strengthen them through exposure. Initiative-oriented training incorporates environmental and physical stressors such as “the sights, sounds, and smells of the battlefield; cognitive mental stressors, such as ambiguity, unpredictability, and sensory overload/deprivation; and an environment conductive to unleashing subordinates’ initiative” (Love 2011, 20).

Live-Tissue Training is an excellent method to prepare soldiers for the bloody realities that they will witness in combat. Live-Tissue Training is a somewhat controversial training technique that consists of simulating combat wounds on animals to

allow soldiers to render aid to the animal to prolong its life. The animals are unconscious and are given drugs so there is no pain felt during the training process. Love states that "LTT [live-tissue training] appears to be successful in treating casualties leading to medics and combat lifesavers becoming better prepared due to the training. It also appears to assist in the 'shock factor' by exposing soldiers to the blood and guts prior to combat" (Love 2011, 21).

Love discusses the Navy's use of the graphic novel as a combat primer for Navy corpsmen as a method to psychologically inoculate. The graphic novel, called *The Docs*, targets young corpsman that have not yet deployed and includes "drawings and captions that depict graphic wounds and a wide range of emotions" (Love 2011, 21). Love explains that the graphic novel is portrayed in a comic book style that would be easy for young soldiers to read and understand and states that "this book is an effective tool to assist commanders in strengthening soldiers through exposure, especially inexperienced soldiers.

During his time in 4th Brigade, 2nd Infantry Division commanded by Colonel Jon Lehr, now Brigadier General Lehr, this author was a young brigade assistant operations officer and was tasked with gathering the tools to incorporate a leadership professional development class on psychological inoculation to combat trauma, into a brigade senior leader offsite conference. The audience for this Leadership Professional Development was officers, captain and above and senior non-commissioned officers, first sergeant and above. The Leadership Professional Development consisted of a video presentation of multiple combat veterans, officers and non-commissioned officers, giving their testimonies in relation to combat casualties. The video presentation was a product

compiled by the I Corps Stryker Center for Lessons Learned and was very informative and eye opening. The idea of using combat veterans should not be limited to tactical training alone. Combat veterans have the experiences that can help prepare our soldiers tactically, technically, and psychologically and should be leveraged to do so.

## Resilience and Hardiness

The Army defines resilience as the ability to grow and thrive in the face of challenges and bounce back from adversity (Department of the Army 2009a). Resilience can also be described as "the capacity for adaptability, positive functioning, or competence following chronic stress or prolonged trauma" (Lopes 2010, 20). John Lopes authored an MBA Professional Report to "identify how leaders can build, foster, and sustain resiliency in their organizations at the unit level." Lopes' goal was to "assist service members in learning strategies to effectively cope with stress under the most arduous of conditions" (Lopes 2010, v). During his research Lopes gathered what he believed were the most accurate definitions of individual resilience and organizational resilience. Individual resilience is "an individual's ability to resist or effectively cope with stressors, to tolerate risks, and to be flexible and confident of his or her ability to successfully deal with such situations minimal untoward effects" (Altman-Dautoff 2001, 11). Group resilience is "the collective ability of the group to learn new skills, build collective efficacy, and positively adapt and adjust to change, challenging conditions, environments, and stressors over the long term" (Lopes 2010, 21). Lopes' study provides an informative "conceptual foundation on what resilience is, a framework on how to build resiliency, and assessment tool dimensions to measure the current state of resilience in small military units" (Lopes 2010, 4).

Lopes' conceptual foundation of resilience which includes enactive, proactive, and reactive strategies to eliminate or mitigate stress, and framework on how to build resiliency which includes four Army models and programs utilized to help others understand, alleviate or mitigate combat stress was discussed in the literature review. What this author would like to concentrate on now is the five characteristics of resilient groups and organizations that Lopes discusses in his study. Lopes defines the five "characteristics of resilient groups/organizations as: concerted leadership, adequate resources, enhancement of organizational learning, flexibility/adaptability in the face of adversity, and goal oriented" (Lopes 2010, 24). These five dimensions of resilience are really the counter to the Primary Stressor Dimensions in Modern Military Operations (Isolation, Ambiguity, Powerlessness, Boredom, Danger, and Workload) that are mentioned in the Bartone article and in Lopes' report.

Table 1. Primary Stressor Dimensions in Modern Operations

Primary Stressor Dimensions in Modern Military Operations

| *Stressor* | *Characteristics* |
|---|---|
| 1. Isolation | Remote location<br>Foreign culture and language<br>Distant from family and friends<br>Unreliable communication tools<br>Newly configured units, do not know your coworkers |
| 2. Ambiguity | Unclear mission or changing mission<br>Unclear rules of engagement<br>Unclear command or leadership structure<br>Role confusion (what is my job?)<br>Unclear norms or standards of behavior (what is acceptable here and what is not?) |
| 3. Powerlessness | Movement restrictions<br>Rules of engagement constraints on response options<br>Policies prevent intervening, providing help<br>Forced separation from local culture, people, events, and places<br>Unresponsive supply chain—trouble getting needed supplies and repair parts<br>Differing standards of pay, movement, behavior, etc., for different units in area<br>Indeterminate deployment length—do not know when we are going home<br>Do not know or cannot influence what is happening with family back home |
| 4. Boredom (alienation) | Long periods of repetitive work activities without variety<br>Lack of work that can be construed as meaningful or important<br>Overall mission or purpose not understood as worthwhile or important<br>Few options for play and entertainment |
| 5. Danger (threat) | Real risk of serious injury or death, from:<br>Enemy fire, bullets, mortars, mines, explosive devices, etc.<br>Accidents, including "friendly fire"<br>Disease, infection, toxins in the environment<br>Chemical, biological, or nuclear materials used as weapons |
| 6. Workload | High frequency, duration, and pace of deployments<br>Long work hours and/or days during the deployments<br>Long work hours and/or days in periods before and after deployments |

*Source*: Paul T. Bartone, "Resilience Under Military Operational Stress: Can Leaders Influence Hardiness?" *Military Psychology* (2006): 134.

Concerted leadership, offers resilient leaders "that provide purpose, guidance, motivation, and direct the allocation of key resources to accomplish the goals of the organization while simultaneously limiting dysfunction and promoting organizational values, learning, growth, and efficacy" (Lopes 2010, 27). Concerted leaders also "skillfully build teams that can handle adversity without a drop in performance through training, education, experience, and provide flexible/adaptable responses in crisis situations" (Lopes 2010, 27). The concerted leadership dimension ties all of the other dimensions together and can have a very positive influence on relieving many of the characteristics of all six primary stressor dimensions.

Table 2. Group/Organizational Resilience Characteristics

| **Unit Resilience Characteristic** | **Description** |
|---|---|
| Concerted Leadership | • Providing guidance direction and proper allocation of resources to accomplish group/organizational goals with minimal dysfunction as well as skillfully building teams capable of facing adversity |
| Adequate Resources | • To include human, social support, emotional and material capital necessary to overcome obstacles, encourage growth, and improve competence and efficacy |
| Organizational Learning | • Accumulating knowledge, enhancing competences, & increasing efficacy through processes that increase the capability of the group to handle future stressful situations and environments |
| Flexibility/ Adaptability in the Face of Adversity | • Ability to adapt, improvise and provide flexible responses to adverse situations that do not waste the units resources |
| Goal Oriented | • The unit contains a common set of values and moves collectively towards a common goal |

*Source*: John F. Lopes, "Theoretical Dimensions of Small Unit Resilience" (MBA Professional Report, Naval Postgraduate School, 2010), 24.

United States Army combat organizations should always strive to have adequate resources across the entire spectrum of the operations process, both in the garrison training environment and the current operating environment. Resources can include "strategic/operational resources such as education, training, equipment, personnel, logistic, medical, and or material support. They can also take the form of human/social support such as group interaction, counseling, social programs, Family Readiness Groups (FRG), Behavioral Health (BH) and or religious support" (Lopes 2010, 28). Proper resources can help relieve some of the repercussions of the isolation, powerlessness, and boredom, primary stressor dimensions. "Resources provide groups/organizations with the tools necessary to reduce stress by increasing the groups' capabilities to overcome obstacles, while simultaneously increasing the capability of the group to build and sustain resilience for the long-term" (Lopes 2010, 28).

The organizational learning dimension of resilience is based on the organizations continuous ability to learn and grow. This could include anything from unit collective training at the platoon level to the Army core competencies. "Organizational learning builds resilience by increasing the units' capabilities in dealing with adversity, while also promoting growth, improving efficacy, and strengthening the capability of the unit and its members in positively dealing with future adverse environments or challenges" (Lopes 2010, 28). Organizational learning can reduce the effects of the ambiguity, danger, and workload, primary stressor dimensions.

The last two dimensions of resilience are flexibility or adaptability and goal oriented. Organizations must be flexible and adaptive in order to accomplish the mission, whatever it may be. Operational variables can change quickly and organizations must

adapt or be defeated. However being flexible and adaptive is not an inherent trait in all organizations and must be exercised during training. Organizations should be challenged in the training environment so that they can practice reacting to changing conditions with flexibility. Being flexible and adaptive is tied to the other dimensions of resilience and organizational leaders must set the conditions to allow their units to demonstrate these traits. To be successful, organizational leaders must build a vision for their units. Lopes explains that "Groups and organizations must share common values, goals, and a sense of purpose" (Lopes 2010, 29). These common goals give an organization something to move forward towards in a combined effort. The sense of purpose that is generated by goal setting that assists organizations in combating ambiguity, powerlessness, and boredom stressor dimensions.

> Together, these [resilience dimension] characteristics coupled with a developmental and lifelong learning perspective enable groups/organizations to build resilience, by enhancing the collective ability of the group to learn new skills, build collective efficacy, and positively adapt to change, challenging conditions, environments, and stressors over the long term without regressive or dysfunctional behavior. They also enable groups/organizations to emerge from each of these situations stronger and more capable of handling future adversity. (Lopes 2010, 37)

According to Bartone that "one potential pathway to resilience is personality hardiness, a characteristic sense that life is meaningful, we choose our own futures, and change is interesting and valuable" (Bartone 2006, 131). Bartone's article presents the hypothesis that hardiness can be a learned behavior and that "Leaders who are high in hardiness themselves exert influence on their subordinates to interpret stressful experiences in ways characteristic of high-hardy persons" (Bartone 2006, 139). This idea is somewhat similar to Lopes' stance that concerted leadership can positively influence organizations. Bartone says that leaders can prepare their units for primary stress

dimensions and help the unit cope with the effects of the stressors "by their example as well as by the explanations they give to the group, they encourage others to interpret stressful events as interesting challenges that they are capable of meeting, and in any case can learn and benefit from" (Bartone 2006, 141). Bartone states that "leaders in military units may well be able to foster increases in the kind of cognitions and behaviors that typify the high-hardy person's response to stressful circumstances" (Bartone 2006, 132). Two of the leadership techniques that Bartone recommends to promote hardiness in organizations are transformational leadership and path-goal leadership.

Love defines hardiness as "a pattern of attitudes and skills that provides the courage and strategies to turn successful circumstances from potential disasters into growth opportunities" (Love 2011, 16). Love also presents evidence that hardiness is a learned behavior. During his discussion of hardiness assessment and training, Love cites an interesting study conducted at Illinois Bell Telephone. After laying off almost half of their employees, about 12,000 workers, the researcher's studying the remaining workforce identified that two-thirds of them were having significant coping issues while one-third were doing quite well under the circumstances. "The study found that the one-third of resilient employees was characterized as high in hardiness attitudes of commitment, control, and challenge" (Love 2011, 16).

Because the results of the study showed that hardiness can be learned Illinois Bell created a hardiness training program so they could boost the amount of hardiness in the remaining employee population. The Illinois Bell hardiness training consisted of "coping, socially supportive interactions, and self-care exercises, plus a procedure for using the feedback from these efforts to deepen hardiness attitudes" (Love 2011, 16). Love agrees

with Bartone in that high hardiness is indicative of transformational leadership and that "hardiness has emerged as a set of personal characteristics that help people turn stressful circumstances from potential disasters into opportunities for enhanced performance, leadership, conduct, health, and psychological growth" (Love 2011, 17).

## Psychological Screening and Assessment

Love's first recommendation is in the arena of effective mental health screening prior to combat, prior to or during initial entry training or even prior to a soldier entering the Army. In his study, Love, draws upon history and uses the methodology of the Spartans and some of the other Greek nations as an example. The examples discussed screening out the unqualified, strengthening warriors through grueling exposure to simulated combat, violence and exposure to the elements, rites of passage within their units, and shared hardships between leaders and subordinates.

> Although the nature of war has changed significantly over the years, the method of preparing an Army for combat remains relatively unchanged. Screening Soldiers prior to combat, strengthening through resilience and exposure, and providing outstanding leadership is as relevant in the contemporary operating environment (COE) of today as it was for the Spartans. (Love 2011, 7)

Some contemporary examples of mental health screening are the 2007 Eisenhower Army Medical Center institutional review board studies. These studies assessed the effectiveness of a systematic method of pre-deployment mental health screening which decreased negative outcomes during deployments to Iraq, the Navy Sea, Air, Land use of the Computerized Special Operations Resiliency Test, and the 75th Ranger Regiment's use of the Ranger Assessment and Selection Process. These mental health screening studies and programs seem to have had significant results. The Eisenhower study looked at about 20,000 soldiers total from six combat brigades, about

10,000 from screened brigades and 10,000 from unscreened brigades. The study found that there were significantly lower rates in the screened brigades versus the unscreened brigades in the categories of suicide ideation, combat stress, psychiatric disorder, occupational impairment and air evacuation due to mental health problems (Love 2011, 8). The Navy Sea, Air, Land use the Computerized Special Operations Resiliency Test for the purposes of mental health screening prior to their personnel attending the Basic Underwater Demolition School.

The Navy chose to begin using the Computerized Special Operations Resiliency Test because of the extremely high attrition rate during Basic Underwater Demolition School. The Computerized Special Operations Resiliency Test allows the Navy to screen their personnel prior to Basic Underwater Demolition School and therefore identify candidates "who do not possess the ability to use desired techniques to overcome adversity" by looking at past behavior (Love 2011, 10). This allows the Navy to accept more qualified candidates into the course which has allowed them to decrease their attrition rate by 15 percent. The 75th Ranger Regiment uses the Ranger Assessment and Selection Process to screen their prospective soldiers, "the key factors they look for in candidates are traits that encompass and develop natural born resiliency, these are the characteristics of the typical Ranger personality" (Love 2011, 11). The Ranger Assessment and Selection Process is a bit more involved than the Computerized Special Operations Resiliency Test; it consists of four to eight hours of personality and intellectual assessments and a background security check, as well as a full clinical interview with a psychiatrist for officer and non-commissioned officer candidates (Love 2011, 11).

Asken, Grossman, and Christensen offer up the Mental Toughness Psychological Skills Profile in their book, *Warrior Mindset*. This psychological screening tool allows individuals to identify their psychological skill strengths in order to maximize their physical skills. The authors explain that everyone possesses some level of psychological skill that are already being used and the Mental Toughness Psychological Skills Profile helps people better understand and enhance these skills. The Mental Toughness Psychological Skills Profile "will also introduce you to new skills and highlight area that you need to strengthen" (Asken, Grossman, and Christensen 2010, 1). The Mental Toughness Psychological Skills Profile consists of 56 statements that must be answered by a range of answers that span from almost always or often to sometimes to seldom or almost never. This skills profile is designed to gauge eight different psychological aspects of performance: confidence, physical arousal, attention control, arousal control, imagery use, self-talk use, and physical condition.

The Mental Toughness Psychological Skills Profile scores the results of the answers to the 56 statements on a scale of 0 to 35. A score of 30 to 35 means "you're in command" of that particular psychological aspect of performance. A score of 25 to 30 means "you passed muster," 15 to 25 means "no medals yet," and 0 to 15 equals "basic training time" (Asken, Grossman, and Christensen 2010, 15). The authors admit that some of the techniques recommended in *Warrior Mindset* to improve performance in these eight psychological aspects of performance might seem odd or uncomfortable at first they urge the reader to challenge themselves to improve. Asken, Grossman, and Christensen state that "A low score suggests an opportunity to add a new dimension to your response and leadership skills. Even if you're 'in command,' this book can help you

understand your skills better, refine them, and use them more effectively" (Asken, Grossman, and Christensen 2010, 16).

Lopes discusses the need for an assessment tool to determine the level of resilience in organizations. Lopes explains that this resilience assessment tool should be used in conjunction with the command climate survey and the Unit Behavioral Health Needs Assessment Survey (Lopes 2010, 25). Lopes states that using these three tools together is important "because the combined picture of these three tools would provide a commander with an invaluable overall assessment of unit morale, training, readiness and discipline concerns coupled with the Behavioral Health and resilience needs of the organization" (Lopes 2010, 25). Lopes states that the resilience assessment tool should be in survey form and align with the five dimensions of resilience and the purpose of the tool is to allow commanders to "target areas of emphasis for training, education, resource allocation or intervention in an effort to safeguard the lives and mental state of the soldiers under their command" (Lopes 2010, 26). Lopes recommends that:

1. A tool or survey be developed (and used at pre-established intervals before, during, and after deployments) with an emphasis on the five resilience dimensions as well as, a tool to mathematically measure and score the results.
2. Data collected from the tool or survey be presented to unit commanders for area of emphasis evaluation, education and recommended training and resource allocation.
3. Mathematical results by unit, type, deployment length, frequency, and location could be maintained by the Office of Comprehensive Soldier Fitness for trend analysis and program improvement. (Lopes 2010, 37)

Lopes contends that assessing and building resilience is "critical to mission accomplishment, longevity and sustainability of soldiers in combat" (Lopes 2010, 37).

## What can be Done to Assist United States Army Combat Organizations to Continue to Execute their Duties once there has been a Casualty during Combat Operations?

### Casualty Evacuation and Survivability

In Army Tactics Techniques and Procedures 4-02, *Army Health System,* chapter 1, "Overview of the Amy Health System," the different threats to United States Army combat organizations and soldiers are discussed in terms of the evolving operational environment and are categorized into two different areas, the general threat and the health threat. The general threat will be the category that the most focus will be applied during this thesis, although historically health threats comprised of disease and nonbattle injuries have been the most significant contributor to combat ineffectiveness, medical improvements throughout recent history have significantly diminished the number of serious casualties and deaths caused by health threats (Department of the Army 2011, 1-1). "The health threat is a composite of ongoing or potential enemy actions; adverse environmental, occupational, and geographic and meteorological conditions; endemic diseases; and employment of CBRN [Chemical Biological Radiological Nuclear] weapons that have the potential to affect the short- or long-term health (including psychological impact) of personnel" (Department of the Army 2011, 1-3). Although the amount of deaths related to health threats has been greatly reduced it can be argued that there are still far more health threat casualties when the psychological impacts of the operational environment are taken into account.

Army Tactics Techniques and Procedures 4-02 chapter 1 and appendix B also discusses the details of casualty care and management, the roles of medical care, previously known as levels of medical care, and the phases of patient treatment and care. These three categories can be somewhat confusing due to their intertwining nature. This

author will attempt to summarize these three categories and how they interact. The components of casualty care and management are first responder care, forward resuscitative care, hospitalization, definitive care, and en route care (Department of the Army 2011, 1-6). The phases of patient treatment and care consist of the emergency medical treatment phase, the advanced trauma management phase, the forward resuscitative surgery or stabilization phase, the theater hospitalization phase and the convalescent care phase (Department of the Army 2011, B-1). The four roles of care are: role 1, facilities that are found at the unit level, role 2, facilities that are staffed by treatment platoon's of medical companies or troops, role 3, military treatment facilities that are staffed and equipped to provide care to all categories of patients previously known as a combat support hospital, and role 4, military treatment facilities within the continental United States such as Walter Reed Hospital (Department of the Army 2011, 1-15). The description of these different roles in relation to the components of casualty care and the phases of patient treatment and care should make it evident what type of medical care is provided at each different role of care.

First responder care generally occurs at the point of injury or wounding and is "defined by its time requirements to provide timely and effective lifesaving interventions" (Department of the Army 2011, 1-6). This life saving intervention can be conducted by utilizing self-aid, buddy-aid, combat lifesaver aid or treatment from a combat medic and is conducted during three sub-phases: the care under fire phase, the tactical field care phase, and the tactical evacuation phase. First responder care and forward resuscitative care generally corresponds with the first three phases of patient treatment and care, emergency medical treatment, advanced trauma management, and

forward resuscitative surgery. “The advanced trauma management or initial resuscitation and stabilization treatment phase is distinguished by the application of clinical judgment and skill of physicians or physician assistants at role 1 and 2 MTFs. The physician and physician assistant at the battalion aid station provide this care” (Department of the Army 2011, B-2). These first two categories of casualty care and first three phases of patient treatment and care all occur at role 1 and 2 facilities with the overall object to keep the casualty alive and stabilized. The next step is to get the casualty to the next role of care if necessary, and if not return the casualty to duty as soon as possible.

The third category of casualty care management, hospitalization, and the fourth phase of patient treatment and care, theater hospitalization phase, is primarily the same thing. Both refer to the capabilities to a role 3 military treatment facility.

> Hospitalization capabilities in the area of operations can vary according to the regional infrastructure, operational area, and tempo of operation. But, a robust capability in the area of operations would contain the following services not normally resident at the lower roles in the HSS continuum of care: advanced burn management; optometry and ophthalmology; pediatric, obstetric and gynecological; dental, preventive medicine, internal medicine and cardiology; eye surgery, maxillofacial surgery, and neurosurgery; intensive/critical care beds and nursing; blood banking service; pathology; infectious disease; medical nutrition therapy; behavioral health; occupational health; medical logistics; and other medical specialties. (Department of the Army 2011, 1-7)

The fourth category of casualty care management, definitive care, relates to the fifth phase of patient treatment of care, convalescent care. Both of these have to do with the care that a casualty receives at a role 4 medical treatment facility. The definition for definitive care found in Army Tactics Techniques and Procedures 4-02, chapter 1, states:

> The definitive care capability includes care rendered to conclusively manage a patient’s condition. This normally leads to rehabilitation, return to duty, or discharge from the Service. Definitive care capability includes the full spectrum of acute, convalescent, restorative, and rehabilitative care in the CONUS. (Department of the Army 2011, 1-8)

The definition for convalescent care found in Army Tactics Techniques and Procedures 4-02, appendix B, states:

> The convalescent care phase of health care entails guiding the patient from the acute phase of treatment, through recovery and rehabilitation to the phase of self-sufficiency. This phase involves clinical judgment as to the proper time for the patient to move to successively more intense reconditioning (in order that he is not challenged beyond the capabilities of his strength). Convalescent care is provided at Role 4 hospitals in CONUS or a safe haven. (Department of the Army 2011, B-3)

There is a discrepancy, however, between the aforementioned definition of definitive care found in Army Tactics Techniques and Procedures 4-02 chapter 1 and the description of definitive care found in appendix B. Appendix B states "Doctrinally, definitive care is delivered at the lowest possible level. Definitive care is not a phase of patient treatment" (Department of the Army 2011, B-3). This means that a casualty could possibly be treated definitively if his wounds could be dealt with in role 1 through 3 facilities. This statement conflicts with the idea that definitive care must be conducted in role 4 medical treatment facilities in the continental United States. The final category of casualty care management is en route care. This is simply the continuation of care while a casualty is being moved from one place to another without causing further harm or compromising the casualty. En route care can be done during casualty evacuation medical evacuation or during patient movement. The only differences here are that casualty evacuation is done by non-medical personnel in non-medical vehicles; medical evacuation is done by medical personnel in dedicated medical vehicles (Department of the Army 2011, 1-8).

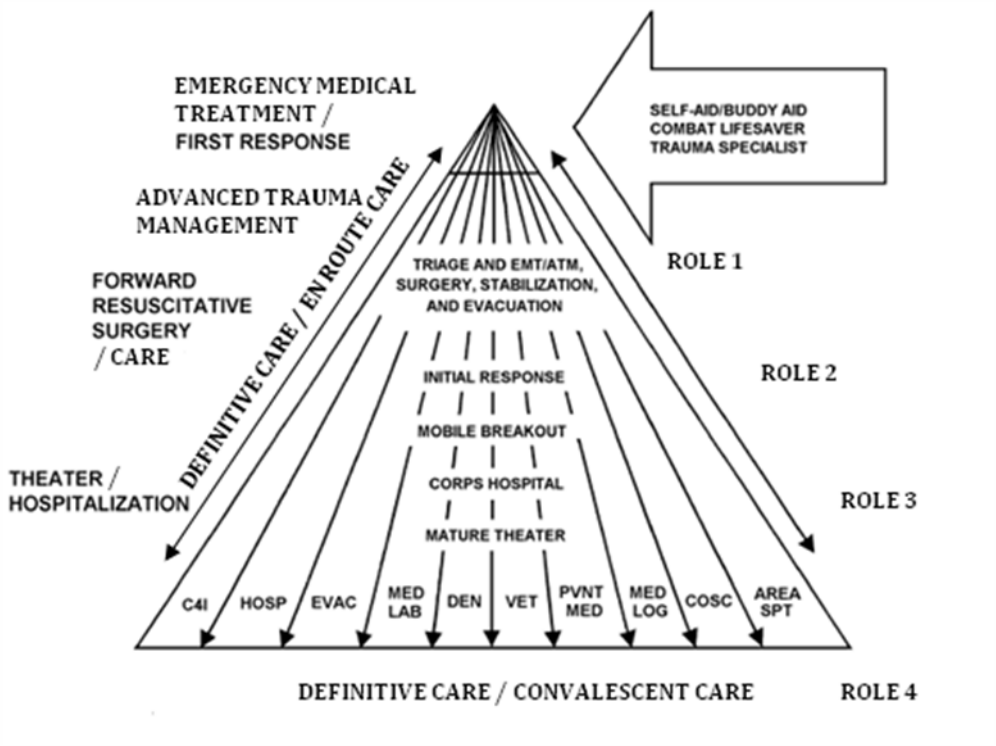


Figure 4. Categories of Casualty Care Management, Phases of Patient Treatment and Care, and Roles of Medical Care

*Source*: Department of the Army, Field Manual 4-02, *Force Health Protection in a Global Environment* (Washington, DC: Government Printing Office, 2003), 1-4.

Modern day medical capabilities and the ability to increase the survivability of casualties utilizing fast and efficient casualty evacuation play a major role in assisting soldiers to continue their duties once a casualty has been incurred. According to Karis

> The killing and wounding capacity of modern weapons will ensure high rates of casualties within hours after hostilities begin. The wounded-to-killed ratio in twentieth century warfare has been consistent at 4:1. Roughly 20% of the battle casualties are killed outright. Even with only minimal care, about 65% of the wounded survive. This leaves about 15% of those hit as being seriously wounded and not likely to live without extensive medical treatment. Recent medical improvements have lowered this latter figure to 3%. Thus, a soldier has roughly a 77% probability of surviving his wounds. (Karis 1989, 9)

Richard Holmes holds a similar view on contemporary casualty evacuation. Holmes states that on the battlefield "Both dead and wounded have to be dealt with. An increasingly sophisticated chain of medical evacuation means that the wounded soldier has an excellent chance of being evacuated by a vehicle or a helicopter, and receiving professional aid relatively quickly" (Holmes 1985, 193). Holmes points out, however, that at times it the mission necessitates that soldier's carry on without treating a casualty immediately. A simple example of this could be when reacting to a near ambush or when conducting a breaching operation. Being distracted with treating casualties during one of these operations will only cause more casualties to occur. This is what Holmes calls "the second problem created by a wounded man–that of continuing with the mission when all one's instincts are to help the victim" (Homes 1985, 194). Holmes explains that during the Vietnam War "care for the wounded often seemed to be given a higher priority than the continuation of battle" (Holmes 1985, 195). In reference to the Falklands War, Holmes stated that the British point of view was that "aggression could only be maintained if soldiers knew that they would be well looked after if they were wounded" and many times "efficient first aid and self-treatment made a vital contribution to success" (Holmes 1985, 195).

## Cohesion

In his monograph Karis asks the question, "Given the anticipated nature of the future battlefield, will battle death seriously degrade the combat effectiveness of surviving soldiers in small cohesive units" (Karis 1989, iii). Karis defines combat effectiveness as "the ability of a unit to perform its mission" and states that "to remain effective, a military unit must maintain its cohesiveness" (Karis 1989, 2). Karis explains

that for a unit to remain cohesive individual soldiers must be accepted as a member of the group, more specifically the primary group, which consists of the team, squad, and platoon. The author gave an example from a World War II study where it was found that "Cohesion was strengthened by physical closeness, by the capacity for interpersonal communications, by the provision of protection from senior officers and non-commissioned officers, and by the gratification of certain personality needs such as the opportunity to display manly toughness" (Karis 1989, 3). Additionally, Karis quotes S.L.A. Marshall on the topic of cohesiveness where he stated "the most serious and repeated breakdowns in combat were due to a failure to control human nature and that training which reinforced the cohesiveness of the small unit was the best prescription to prevent this breakdown" (Karis 1989, 7). Some of Karis's findings on unit cohesion include the following:

> In order to maintain their combat effectiveness, small units will have to be trained to anticipate the true conditions of the battlefield. Leaders will have to maintain the cohesion of the primary group and provide for the protection for their units in a lethal environment. If they do not, the morale of the combatants will be undermined and the combat effectiveness of their units will diminish. (Karis 1989, 9)

> The key to understanding the problem of death in a cohesive unit is the fact that the danger of being killed or maimed imposes a strain so great that it causes the soldier to break down. It is the fear of death or injury which makes combat so harrowing an experience. Death, therefore seriously degrades the bonds of the cohesive military unit. (Karis 1989, 11)

Karis makes it clear in his monograph that casualties can degrade the combat effectiveness of organizations by disintegrating the cohesiveness of those organizations. Karis argues that to fight against the effects of this disintegration the unit must build a primary group support structure, execute realistic combat training, and utilize effective leadership prior to and during combat operations (Karis 1989, 34).

## Psychological Preparation

In *On Combat* Grossman discusses training techniques which are pertinent to being psychologically prepared for combat and casualties that occur during combat. Grossman quotes a young Marine that said "My old Gunny taught me that in combat you do not rise to the occasion, you sink to the level of your training" (Grossman 2004, 71). Grossman is adamant that "whatever is drilled in during training comes out the other end in combat-no more, no less" (Grossman 2004, 71). This is very similar to the common phrase "units must train as they will fight." Grossman states that "There is an old Army adage that says, 'You don't have to practice being miserable.' There is some truth to these words, but sometimes they are used as an excuse to avoid hard, rigorous training. Sometimes there is value in practicing to be miserable" (Grossman 2004, 128).

Two training principles that Grossman stress are: 1. never "kill" a warrior in training, and 2. try to never send a loser off your training site. Grossman explains that when training exercises involve "killing" a trainee as part of the scenario or because they made a mistake the trainee is being conditioned to die. When trainers "kill" students during training scenarios the student will stop what they are doing and be "dead." Grossman explains when training is conducted in this manner the warrior being trained will display the same behavior in combat when they are wounded (Grossman 2004, 129). "If a trainee is conditioned to stop when he is hit (as if the scenario is over) he programs an undesirable and potentially self destructive action into his mind" (Grossman 2004, 130). Grossman says that "when a training scenario does not go the way you want it to, then do it again, but do not ever think you are dead in an exercise" (Grossman 2004,

129). This will give the warrior, if he is hit during combat, the necessary mental tools to continue to fight as necessary to survive and win.

Of note here is that there may be some utility in simulating casualty situations to practice the casualty evacuation process if that is one of the training objectives. Additionally, at times it is acceptable or necessary to “kill” a leader or soldier during a training event to exercise the assumption of command or responsibility of the “killed” trainee. This allows the subordinate to step up and take over; again this must be a planned training objective.

The second principle Grossman discusses is “try to never send a loser off of your training site” (Grossman 2004, 131). Grossman describes the techniques of Ken Murry, the Director of Training for the Armiger Police Training Institute, co-founder of Simunition, and the developer of the original Simunition Instructor Training Program, who says “giving warriors the experience of losing in a simulation actually begins to condition a risk aversion pathway in the brain to which they may turn during similar experiences in the future-they may actually stop fighting and give up as they were programmed to do in training” (Grossman 2004, 130). Murry insists that “shot ain’t dead” and advises trainers to “never let a student out of a training area without ensuring they are a decisive winner" by "forcing, if necessary, the student to engage once they have been engaged, even if they argue that they have been hit in a manner that is survivable” (Grossman 2004, 131). Grossman explains that when a warriors conduct an exercise and fail and then repeat the exercise and succeed they realize their flaws and mistakes and can train on how to correct those mistakes, in the end this makes the trainees “superior warriors” (Grossman 2004, 131).

## Unit Memorial Ceremonies

The United States Army War College Strategy Research Project, *Post-Deployment Memorial Ceremony: A Vital Link*, 2008, focuses on the challenges presented by combat casualties in the United States Army and the Army's continuity of care for those casualties. The author, Kenneth Stice, states that the purpose of his study is to "demonstrate the need for a post-deployment memorial ceremony as the final vital link in the chain of connections between soldiers, families, units and communities" (Stice 2008, 1). Several key words in that quote were "final" and "vital." The post-deployment memorial is the last step in a brigade combat team's progress, which the author states is the primary unit of action in today's modular Army, along this "chain of connections." Stice explains that there are three groups: soldiers, families, and communities that "share common connections that are both strengthened and stretched during times of unit deployments" (Stice 2008, 4). The author stresses the importance of the proper planning and execution of unit deployment ceremonies, casualty response operations, memorial ceremonies both at the Rear Detachment and unit memorial ceremonies down range, post-deployment welcome home ceremonies and post-deployment memorial ceremonies. All of these operations must be carefully planned and meticulously rehearsed.

Stice describes that the unit's actions during the pre-deployment timeframe are critical for success later during the deployment and re-deployment. The Army assists units that are a part of the Army Force Generation system by providing the necessary resources to units as they progress through the reset and train phase, the ready and the available phase. It is crucial that generating units identify who will be a part of the Rear Detachment command early on in the reset and training phase and that subordinate units

build and foster successful FRG to set the proper conditions for the deployment. Stice states that “units that strengthen the connections between Rear Detachment, FRG and community during the reset and training phase lay a solid foundation to weather the storms of impending deployment challenges” (Stice 2008, 8). Some of the ways to strengthen these connections can be accomplished through social events conducted by the FRG as well as other events such as strong bond events and prayer breakfasts sponsored by the unit chaplain. Social events and the familiarity gained by families spending time with one another is important but so is the primary reason the FRG exists, the passing of timely and accurate information from the Rear Detachment commander through FRG leaders to the concerned families. This communication process must be exercised and rehearsed during battalion and brigade field training exercises and mission readiness exercises to ensure the unit is properly prepared.

The unit deployment ceremony is an important symbolic ceremony that encompasses the casing of the unit colors and represents the reality that the unit will soon be deploying. This ceremony helps the soldiers in the unit and their family members come to terms with the fact that the soldier will be leaving and going into harm’s way. It also represents the transfer of responsibility from the deploying unit commander to the rear detachment. Stice states that the unit deployment ceremony “provides leaders, units, soldiers, families, and communities a common opportunity to gather and exchange words of commitment during a ceremony that honors the resolve of soldiers to perform their duty in response to the nations call” (Stice 2008, 8).

Stice describes that casualties are inevitable and that casualty response operations are conducted at some point during a deployment by every unit. The author explains quite clearly that

> Casualty response operations encompass all of the actions that the Army and individual units take after the death of a soldier. Casualty response operations include the concurrent official actions taking place from the time the casualty occurred to the completion of all required activities. Some of these actions occur at the deployed unit location, others at the home station. All of these actions require individuals to expend emotional energy through their involvement in accomplishing these special tasks. (Stice 2008, 11)

The author explains that the casualty response operations begin with the notification of the family and continue with the assigned Casualty Assistance Officer assisting family members with anything pertaining to the deceased soldier. It is important that the unit Rear Detachment have good communication with assigned Casualty Assistance Officers in order to monitor the situation and add any additional assistance if necessary. The Casualty Assistance Officer provides an additional link from the unit to the casualty's family. This link is important because the Rear Detachment will plan and execute the home station memorial ceremony according to the family's wishes (Stice 2008, 12).

The deployed unit conducts simultaneous casualty response operations wherever they are located. These casualty response operations are exasperated by the reality that the unit must drive on with its mission while honoring the fallen comrade. Not only must the unit conduct an appropriate memorial ceremony for the casualty but it must also allow the surviving members of the unit "the opportunity to grieve in private and public ways" (Stice 2008, 16). There are multiple ways that this grieving can be accomplished. Stice discusses these different grieving outlets such as unit chaplains and psychologists, Army stress control teams, the utilization of leader led post mission talks, and critical event

debriefings and of course the memorial ceremony. The author does stress, however, that because of the operational tempo the amount of time available for soldiers to grieve may be limited. Stice states that the respite given to soldiers is “brief and temporary” and “unit operations require many soldiers to refocus and continue with missions, even while they are still mourning their fallen comrade” (Stice 2008, 19).

While the Rear Detachment and unit are conducting their simultaneous casualty response operations it is vital that the unit and rear detachment have very good communications with one another. Stice describes in his study that “many times comforting words of a surviving spouse or parent is sufficient to touch and challenge the unit members toward healthy decisions” and likewise “unit members may also express their feelings of respect and shared loss with the surviving family through video and written means that are collected and sent to the family” (Stice 2008, 20). The reality of the situation, though, is that the unit, family, and community are not together during these casualty response operations and this is why post deployment memorial ceremonies are so very important. “Post-deployment memorial ceremonies are vital events to facilitate healing, rebuild unit esprit, strengthen connections, and set the conditions to refocus warriors for future challenges” (Stice 2008, 28).

## Debriefings

Tactical debriefings, psychological debriefings, critical incident debriefings, and after action reviews are many different names for a technique that drive toward a similar outcome, figuring out what was supposed to happen, what actually happened, and what can be learned from what happened. Grossman has studied the subject of critical incident

debriefings at length and describes that there are two primary functions of a critical incident debriefing.

> First, it is needed to reconstruct the event from the beginning to the end, to learn what was done wrong, what was done right, and to help develop operational lessons," "Second, the debriefing is a time to put everyone back together. Remember there might be memory loss, memory distortion, irrational guilt, and a host of other factors clouding the ability of the combatants to deal with everything that happened to them. The debriefing is a tool to sort out these matters, and to restore morale and unit integrity. (Grossman 2004, 295)

Although a tactical debriefing such as post patrol debrief or mission after action reviews are fairly commonplace or standard operating procedure in most combat organizations psychological debriefings and critical incident debriefings are not. In *On Combat* Grossman quotes Artwohl and Christensen, authors of *Deadly Force Encounters*, who say

> A debriefing is any discussion after an event that helps the participants come to terms with it, and learn from it. Hopefully, it helps to gain closure so that event will not continue to cause emotional distress. An informal debriefing can simply be a discussion that arises spontaneously after an event, while a formal debriefing takes the discussion one step further because it's organized and facilitated to ensure it helps everyone. (Grossman 2004, 295)

Grossman discusses several debriefing principles that he considers crucial for the recovery of warriors involved in a traumatic incident. The first debriefing principle is "you are only as sick as your secrets" (Grossman 2004, 261). What Grossman is describing here is the subject of survival guilt. "The first response of most people upon seeing sudden, violent death is relief; they are relieved it did not happen to them" (Grossman 2004, 260). Grossman explains that this totally natural feeling of relief is almost immediately followed by shame and thoughts like, "I wish it were me. I want it to be me. I wish I were dead" and thoughts that convinces warriors that it's "all my fault" Grossman 2004, 265). If the proper debriefing is not conducted it is thoughts like these

that can make a soldier a psychological casualty. If you know in advance that it is normal upon seeing trauma and death, to think, 'thank God it wasn't me', then that thought will not have the power to hurt you later" (Grossman 2004, 260). The second debriefing principle that Grossman discusses is "pain shared is pain divided" (Grossman 2004, 262). This idea lets warriors equally share the pain caused by a traumatic event with others that were involved so that no one man bears the weight of it all. Grossman states that "they come in with the weight of the world on their shoulders, and they walk out with their fair share. Pain shared is pain divided" (Grossman 2004, 262).

Grossman does concede that these critical incident debriefings, if used, must be conducted properly. He explains that "the debriefing can potentially do harm, just as any medical procedure can if done incorrectly" (Grossman 2004, 311). Grossman lays out some ground rules for those that will be executing the debriefing:

1. Do not force individuals to participate. Explain to those involved in the incident why the debriefing is important and that it can potentially help others and they will generally agree to participate.
2. It is important that soldiers are not required to conduct their debriefings after returning home. The debriefing should be conducted as soon after the battle as possible.
3. If at all possible, outsiders should not conduct the debriefing. Someone they know, trust and respect, someone with the same background and the same warrior ethos, and someone who has been with tem in the past should do it.
4. The briefing should not stand alone. It should be part of a continuum of psychological support, which includes referrals for counseling, education, and follow up for those who need it.
5. Try to avoid a "sob fest." We understand if our brothers and sisters weep, but the participants should go into the debriefing knowing that one key objective is to delink the memory from the psychological arousal.

## Summary

This chapter references United States Army field manuals, official military policies, United States Government sponsored studies, professional books and journals,

and scholarly research papers in order to answer the primary and secondary research questions. The primary question is: How can United States Army combat organizations better prepare for the inevitability of casualties? Through a qualitative analysis, this chapter answers the following secondary research questions: (1) what is categorized as a casualty; (2) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (3) What can be done to assist United States Army combat organizations to execute their duties once there has been a casualty?

Furthermore, this chapter addressed understanding fear and stress caused by casualties or the possibility of becoming a casualty and the common symptoms and reactions related to fear and stress. This chapter also described conditioning and inoculation methods against becoming a casualty that can be attained through repetitive focused training and the resilience that comes from a result of this training. Additionally, multiple psychological screening and assessment techniques and how they apply to natural born resiliency, mental toughness, psychological skills, and levels of resiliency were discussed.

This chapter also discussed casualty evacuation procedures and survivability doctrine that that assist soldiers in continuing their duties because they know they will be properly cared for if they become a casualty. Unit combat effectiveness and cohesion and the effects of battle death on combat organizations was discussed as was the psychological training techniques that prepare soldiers to endure during combat. Additionally, the importance of casualty response operations and unit memorial ceremonies during combat operations, in reference to the surviving soldiers in the unit's ability to continue with the mission was discussed. Finally, this thesis addresses the

critical need for proper debriefings after traumatic events that occur during combat operations, such as the loss of a best friend or member of a unit, in order to develop operational lessons, share the pain of the loss, and restore morale and unit integrity.

# CHAPTER 5

# CONCLUSIONS AND RECOMMENDATIONS

## Summary

Based on the findings of this qualitative research project this author concludes that the United States Army is not doing enough to prepare its combat organizations for the inevitability of casualties. The primary question presented for research was: How can United States Army combat organizations better prepare for the inevitability of casualties? Through a qualitative analysis, this thesis answers the following secondary research questions: (1) What can be done to better prepare United States Army combat organizations prior to the occurrence of casualties; (2) What can be done to assist United States Army combat organizations to execute their duties once there has been a casualty?

## Conclusions

Although the United States Army has made great strides towards preparing "individual soldiers" with programs such as the Soldier Combat and Well Being Model, the Battlemind Program, the Army CSF Program, and the Army Resiliency and Master Resiliency Programs, it has not developed a comprehensive program to prepare "organizations" for the inevitability of casualties. It seems that the Army has recognized that the horrors of combat have had an obvious detrimental effect on the psychological and physical well-being of soldiers. This is evident because of the programs the Army has put in place such as Army Combat Stress Control Teams and the Post-Deployment Health Reassessment process.

> Soldiers, families, units, and communities are faced with the reality of combat casualties. In an area of persistent conflict this reality will remain constant. The

> human dimension of war will remain central. The Army's transformation into a modular expeditionary force will pose many new challenges. Unit pre-deployment actions can be most helpful in establishing healthy and strong connections to support soldiers, families, and communities through the difficult challenge of responding to combat casualties." (Stice 2008, 10)

Current Army programs provide excellent support to deployed soldiers and families at the home station in ways that fulfill the Army Strong campaign and the Army Family Covenant. The Army recognizes the positive relationship between group cohesion and psychological well-being, however, this author argues that the Army is still much too reactive in its methods in dealing with the effects of casualties and must turn its efforts to a proactive, prevention based strategy.

Because there is no Army program that prepares combat organizations for casualties it has been up to commanders at all echelons to prepare their organizations. As in all things, commanders must take ownership of their organizations and bear the weight of the responsibility to prepare their units for combat casualties. Some commanders have done this quite well but others have not prepared their organizations properly and their subordinates and organizations have paid the price for it. Commanders must understand how to build a psychologically resilient and hardy organization. "The prototypical hardy leader leads by example, providing subordinates with a role model of the hardy approach to life, work, and reactions to stressful experiences" (Bartone 2006, 144).

Leaders must identify the risk factors and repercussions that casualties have on soldiers and organizations as a whole before they deploy and conduct operations. The cohesive bonding of organizations needs to occur prior to combat because casualties will disrupt their combat effectiveness. If a solid, cohesive unit has not been established prior to combat; organizational morale will plummet when casualties are taken. "Combat

casualties have negative effects on both individuals and teams. These negative effects may include: loss of innocence; numbing fear; anger and resentment toward host nation population; and loss of confidence in equipment, leaders, or training" (Stice 2008, 15). Unit cohesiveness is the armor that protects organizations from the traumatic effects of battle death but the armor must be forged well before it's worn into battle.

Strategies for continuing the fight during ongoing operations should be learned through psychological preparation training prior to combat and should be strengthened through a combination of soldier and leader education, and individual and collective training. Increasing the amount of individual soldier and organizational experience by facing the stresses of simulated casualties during training, can build up a level of resiliency, thereby significantly decreasing the traumatic effects of combat casualties in the future. Leaders must conduct extensive and rigorous training that increases the level of stress, promoting unit morale and individual courage. "Building resilience is critical to mission accomplishment, longevity and sustainability of soldiers in combat" (Lopes 2010, 37).

The Army must provide effective training and education for its leaders. One of the methods needed to build resiliency in organizations is leader development. It is imperative that the Army put stresses the importance of leader development, specifically with the education of both officers and non-commissioned officers. This way the Army, as a learning organization, can improve and grow. Leader development occurs in the institutional Army and the operational Army. Army leaders must leverage our training institutions to educate our soldiers and leaders on the importance of preparing for casualties prior to the harsh realities of combat. Organizational preparation for casualties

should be incorporated into the curriculums of initial entry training programs as well as the Officer and Non-Commissioned Officer Education System.

Through emphasis from corps, division, and brigade senior leaders the Army can assist in mitigating the problem of the lack of proper unit preparation for the inevitability of casualties by leadership training within their organizations. The priority and emphasis on this critical subject must be placed at a high level to insure that subordinate units understand its importance. This involves a top-down education process for leaders to identify the necessary changes within their organizations and institute these changes.

## Recommendations

The United States Army has incurred thousands of casualties during the last 11 years of sustained combat. However, the casualty statistics from the War on Terrorism are relatively low in comparison to World War II, the Korean War, and the Vietnam War. The time may come in the future when the United States Army must face a near peer adversary in a high intensity conflict where the number of casualties will be unlike anything that the Army has experienced recently. Every day organizations across the Army are either preparing for war or are actively engaged in conflict without being properly prepared to face the grim reality that they will most likely lose someone within their ranks. Organizations can be inoculated from the horrors of casualties during combat long before they are ever required to step on an actual battlefield. This author endeavours to mitigate the effects of combat casualties on Army combat organizations by presenting methods to prepare these organizations for the reality and inevitability of casualties during combat with the following recommendations.

The Army should institute a comprehensive program aimed at preparing organizations for the inevitability casualties during combat operations. These preparations should teach soldiers and leaders strategies for dealing with death in combat and assist leaders in understanding the psychological impacts of fear and the symptoms and reactions that are caused by fear, how to use conditioning and inoculation techniques to overcome the psychological and physiological effects of casualties that achieve the ultimate goal of enhancing survival, and leadership techniques that focus on how to build resilience and hardiness in organizations. These techniques must be executed through intense, repetitive training that will force muscle memory in soldiers and this tough, realistic training must be driven by competent leaders. The Army must provide leaders effective training and education on the subject of casualties in combat. It is imperative that the Army emphasizes leader development, specifically with the education of both officers and non-commissioned officers. This leader development must be instituted throughout TRADOC within all levels of the Officer Education System and Non-Commissioned Officer Education System and then be carried on into the fighting force and emphasized by commanders at all levels.

The Army should consider instituting psychological and mental health screening on new recruits as a prerequisite to being enlisted or commissioned in the service of the Army and combat organizations should conduct these screenings on their soldiers in conjunction with resiliency assessments prior to deploying to combat. This psychological and mental health screening will allow the Army to weed out soldiers that do not have the necessary qualities to deal with the adversities and stressors of combat.

This author concurs with the idea that leadership and training techniques can be used to reduce combat stress in combat organizations. There are correlations between the subject of preparing units for combat stress and preparing for the inevitability of casualties in the United States Army combat organizations. Any training that can assist soldiers in learning strategies to effectively cope with stress under arduous conditions will also prepare them for the inevitable stress of combat casualties.

The Army should continue to stress the importance of casualty evacuation operations and reinforce the expectations of combat organizations to be at an extremely high proficiency in the category of medical training. This training must be focused on all soldiers, not just medical personnel. This author cannot stress enough how important first responder medical skills are for the survivability of soldiers on the battlefield. It is imperative that combat organizations are trained and proficient in first responder and combat lifesaver skills. Efficient first aid and casualty evacuation will continue to play a major role in the soldiers will to fight.

The Army should develop a psychological inoculation program that incorporates the strategies used by successful combat veterans and utilizes these strategies to teach soldiers the tools to deal with the death. This program could be in the form of a Mobile Training Team, consisting of combat veterans that have dealt with casualties within their previous units, that travels to units as they conduct their preparations to deploy to combat. This program could also use Army resources to create a series of training videos that incorporate the testimonials of these combat veterans, to assist combat organizations in their preparations.

## Research Recommendations

The author recommends further research to determine the scope of the effects of casualties on individual soldiers and the correlation between individual soldier preparation and collective organizational preparation. In other words, how much does the individual soldier's inability to deal with casualties affect the organization as a whole? This thesis does not address the topic of coping with casualties after fighting has concluded and organizations have redeployed. Additional study needs to be directed towards the strategies needed to cope with casualties. Specifically, what can United States combat organizations do to cope with casualties after fighting has concluded?

REFERENCE LIST

Altman-Dautoff, Diane C. 2001. Exploring individual and organizational resilience as factors in effective transient work teams. Diss., Pepperdine University.

Asken, Michael J., Dave Grossman, and Loren W. Christensen. 2010. *Warrior mindset: Mental toughness skills for a nation's peacekeepers*. Millstadt, IL: Warrior Science Group.

Bartone, Paul T. 2006. Resilience under military operational stress: Can leaders influence hardiness. *Military Psychology* 18: 131-148.

Bethea, Theodore C. 2010. Leadership and training techniques to help reduce combat stress in the United States of America's ground combat forces. Master's thesis, Command and General Staff College.

Bogdan, Robert C., and Sari K. Biklen. 1992. *Qualitative research for education: An introduction to theory and methods*. Boston, MD: Allyn and Bacon.

Broadnax, Kevin. 2008. Combat and operational stress: Minimizing its adverse effects on service members. Master's thesis, Command and General Staff College.

Clausewitz, Carl Von. 1984. *On War*. Edited by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press.

Department of the Army. 1994a. Field Manual 8-55, *Planning for health service support*. Washington, DC: Government Printing Office.

———. 1994b. Field Manual 22-51, *Leaders manual for combat stress control*. Washington, DC: Government Printing Office.

———. 1998. Field Manual 8-51, *Combat stress control in a theater of operations*. Washington, DC: Government Printing Office.

———. 2004. Field Manual 1-02, *Operational terms and graphics*. Washington, DC: Government Printing Office.

———. 2006. Field Manual 4-02.51, *Combat and operational stress control*. Washington, DC: Government Printing Office.

———. 2007. Field Manual 4-02.2, *Medical evacuation*. Washington, DC: Government Printing Office.

———. 2009a. *Army posture statement*: *Comprehensive soldier fitness*. http://www.army.mil/aps/09/information_papers/comprehensive_soldier_fitness_program.html (accessed 1 April 2012).

———. 2009b. Field Manual 4-0, *Sustainment*. Washington, DC: Government Printing Office.

———. 2009c. Field Manual 6-22.5, *Combat and operational stress control manual for leaders and soldiers*. Washington, DC: Government Printing Office.

———. 2011. Field Manual 4-02, *Army health system*. Washington, DC: Government Printing Office.

Grossman, Dave. 1995. *On killing: The psychological cost of learning to kill in war and society*. New York: Little, Brown and Company.

Grossman, Dave with Loren W. Christensen. 2004. *On combat: The psychology and physiology of deadly conflict in war and in peace*. Belleville, IL: PPCT Research Publications.

Holmes, Richard. 1985. *Acts of war: The behavior of men in battle*. New York: The Free Press.

Karis, Daniel G. 1989. Of blue badges and purple cloth: The impact of battle death in a cohesive unit. Master's thesis, Command and General Staff College.

Keegan, John. 1976. *The face of battle: A study of Agincourt, Waterloo and the Somme*. London: Penguin Books.

Lopes, John F. 2010. Theoretical dimensions of small unit resilience. MBA professional report, Naval Postgraduate School.

Love, Ricardo M. 2011. Psychological resilience: Preparing our soldiers for war. Strategy Research Project, United States Army War College.

Marshall, Catherine, and Gretchen B. Rossman. 2006. *Designing qualitative research*. Thousand Oaks, CA: Sage Publications Inc.

Marshall, S. L. A. 1951. *Commentary on infantry operations and weapons usage in Korea: Winter of 1950-51*. Chevy Chase, MD: Johns Hopkins University.

Merriam, Sharan B. 1998. *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.

Moran, Lord. 1987. *The anatomy of courage: The classic study of the soldier's struggle against fear*. 3rd ed. New York: Avery Publishing Group Inc.

Patton, Michael Q. 1990. *Qualitative evaluation and research methods*. 2nd ed. Thousand Oaks, CA: Sage Publications Inc.

Powley, Edward H., and John F. Lopes. 2011. Dimensions of small unit resilience in organizations facing threats, disruption, and stress. MBA Professional Report, Naval Postgraduate School.

Stice, Kenneth. 2008. Post-deployment memorial ceremony: A vital link. Strategy Research Project, United States Army War College.

Turabian, Kate L. 2007. *A manual for writers of research papers, theses, and dissertations*. 7th ed. Revised by Wayne C. Booth, Gregory G. Colomb, Joseph M. Williams, and the University of Chicago Press Editorial Staff. Chicago: University of Chicago Press.

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